

# CAMERA CRAFT



**SAN FRANCISCO, CALIFORNIA**



*"Put it up to men who know"*

Knowledge without experience is theory. Theory without practice is without value. The choice of a photographic paper must be based on practical knowledge.

The leading photographers in this country use

C Y K O

The professional photographer is making prints day in and day out.

A dozen demonstrators wait on him every day to show him that something else is better than what he is using.

The proof of CYKO superiority is that he continues to use

C Y K O

**AnSCO Company**

Binghamton, N. Y.

Please Mention Camera Craft when Corresponding with Advertisers.



**"T**HE child with a camera habit is no longer an interloper between earth and sky. He is never lonesome, wherever he is, because he feels the kinship that exists between himself and all living things," says Elbert Hubbard.

The Anso Camera is so simple in construction and easy to work, that with it a child can make as good outdoor photographs as a professional.

There is *one* camera that makes a picture of every well directed exposure and puts the user out of the guessing class. That camera is

## The Superb Anso

Always use Anso film with an Anso or with any other camera. It has the right speed and the correct chromatic balance to make good results doubly sure.

Print your pictures on Cyko paper—the prize-winner at all photographic exhibitions. Used by professionals everywhere because it produces best results.

*Twenty styles of Anso Cameras, from \$2 to \$55, are shown in our catalog, "The Settled Fact." It will cost you nothing if you are really interested.*

**ANSCO COMPANY, Binghamton, N. Y.**

Please Mention Camera Craft when Corresponding with Advertisers.



# Five Hundred NEW Defender Dealers

*Who is YOUR Dealer?*

He has Defender Photographic Supplies  
because he is convinced of the superiority of

Vulcan Film, Vulcan Plates  
Defender Chemicals  
Argo Paper

ASK US FOR NAME  
OF YOUR  
DEALER

-:-

## Enlargement from your Favorite Negative FREE OF CHARGE

To convince you that ARGO is the paper for you to use, we offer to make an enlargement from your best Vulcan Plate or Vulcan Film negative on Argo Paper, free of charge. The enlarged print will be six times the size of your original negative. It will not cost you a cent. We will make the enlargement either in black and white or sepia-tone, according to the character of the subject of the negative which you send. All we ask is that you enclose with each film negative a Vulcan Film carton, and with each plate negative a Vulcan or Defender Plate label from top of box. We reserve the right to make for sample purposes a few prints from your negative before it is returned to you.

Be sure to send your name and address with each negative

DEFENDER PHOTO SUPPLY CO.  
ARGO PARK                      ROCHESTER, N. Y.



# Latest News

---

SAN FRANCISCO, JUNE, 1912

---

## FIRELITE SOLUTION

Those firelight effects certainly are becoming more popular every day. The making of home portraits is one of the most interesting of the innumerable ways in which the camera can be used for either pleasure or profit.

With the use of Firelite Solution beautiful, artistic prints of harmonious tone and full of character are the result. So simple is the manipulation that the amateur photographer can handle it without the least difficulty.

Firelite Solution is a compound of mineral molecules for producing these beautiful tones. It is a solution that has been tested thoroughly. Its results are absolutely permanent. Firelite is put up in three sizes, 4 ounces, 8 ounces and 16 ounces, and sells for 25 cents, 50 cents, and \$1.00 a bottle. You had better try it.

---

## A LETTER TO OUR CUSTOMERS

As we feel that our customers are always willing to know of new and successful departures placed on the photographic market, we will hereafter make it a point to furnish the information as soon as possible, through these columns under this heading: "The Latest Sunset News."

As a starter we wish to make known the new non-poisonous developing agent, placed on the market by the American Photo Specialty Co., and for which we secured the Pacific Coast agency.

Exol is the name of this new agent. It is refined in Germany and packed in this country. Before we accepted the agency for Exol, we gave it a thorough "try out" in our own dark-rooms, and were so well pleased with the product that we immediately secured the agency. •

Exol needs only the addition of sodas to make a vigorous, economical and convenient developer for plates and films of paper. It is absolutely non-poisonous and does not stain the fingers. Exol possesses remarkable keeping quality and the prepared developer may be used repeatedly until exhausted. Following is list price of Exol: 1-ounce bottle, 40 cents; 4-ounce bottle, \$1.40; 8-ounce bottle, \$2.60; 16ounce bottle, \$5.00; 32-ounce bottle, \$9.50. Just try one ounce of Exol and you'll thank us for this information.

A big bargain list of second-hand cameras and lenses has just been completed. Some real bargains, too. Send for the list; it doesn't cost a cent.

That 8x10 enlargement at 30 cents is certainly perfection. Send us a negative. You'll be agreeably surprised with the results.

---

# The Sunset Photo Supply Co.

(INCORPORATED)

895 MARKET STREET

San Francisco

California

Please Mention Camera Craft when Corresponding with Advertisers.

# ASSAY TEST

**CENTRAL PLATES STAND EVERY TEST:—**

Purity, strength, uniformity, gradation, ease of manipulation, absence of spots and stains, fineness of grain, speed and price --- all indicate the one fact that Central Plates are the Plates for you.

---

*Send your name on a postal for our new book, "Central Progress". You will read it from cover to cover and be interested every minute.*

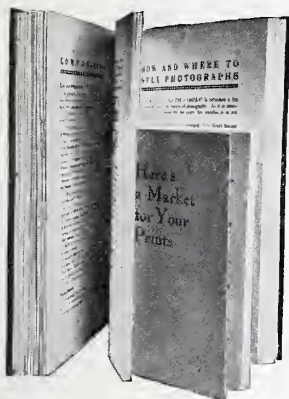
---

## **CENTRAL DRY PLATE Co.**

**1811 ARSENAL ST., ST. LOUIS, MO.**



## CASH AND THE CAMERA



**247 Vital Photographic Secrets, Ideas, Methods** that will enable you to turn into reality that desire to make and sell prints to publishers.

Printed on fine eggshell book paper of standard size—6 x 9 ins. Special art cover, title stamped in gold. **Price \$1.**

### Here's a Market for Your Prints

A pocket size leaflet—3 x 6 inches—printed on heavy, durable, antique stock. Contains revised list of 39 publishers and buyers of prints. Gives in detail their individual requirements and tells prices paid per print. Here is a tangible basis on which you can work. **Price 50 cents.**

**Get Both for \$1.** Send \$1 bill and I'll mail both postpaid for a limited time to introduce this **MONEY MAKING** system. Do it today.

**A. S. DUDLEY, Publisher**  
Box 775 A PHILADELPHIA, PA.



**WE WILL**

## Show You

If you have not seen our genuine Sepia Enlargements send us 25c. and one of your negatives and we will send you, pre-paid, one 8x10 Sepia Enlargement, art mounted. Your money back if you can get a better one for twice the price.

*Catalogue Free.*

**Photo Crafts Shops**

Dept. B

Racine, Wis.

# DURATOL

**NON-POISONOUS  
RAPID DEVELOPER**

produces essentially the same results which are obtained from other Coal-tar developers.

It is economic by reason of slow exhaustion and the only one producing fog-free negatives.

It has no deleterious effect on the hands.

Sample and Directions for Use from

**SCHERING & GLATZ**

150 MAIDEN LANE  
NEW YORK

Please Mention Camera Craft when Corresponding with Advertisers.



**\$15.00**



## PRINT YOUR PICTURES ANY SIZE FROM GLASS OR FILM NEGATIVES

From the negative made in a small camera, you can print pictures any size you wish, at any hour of day or night—changing size of prints at will, by using

## THE RADION Enlarging Printer

The equipment of the Radion Enlarging Printer is absolutely complete—all you need is your negative, your camera and a sheet of photographic bromide paper.

The Radion Enlarging Printer is quite easy to operate and its work is practically as quick as contact printing. The finished prints are equal in every respect to those produced by the most expensive apparatus. The light is entirely self-contained: condensers have been eliminated and when not in use the machine closes compactly into a very small space.

**PRICE \$15.00**

### Write for Descriptive Literature

Every camera owner should know the full possibilities and uses of the Radion Enlarging Printer. Send for full information about it now and see the Radion at your dealer's. If he can't supply you, write direct to us. Sent prepaid on receipt of price.

## H. C. WHITE CO.,

Lens Grinders and Makers of Optical Instruments  
for Over 40 Years.

502 RIVER STREET, NORTH BENNINGTON, VT.

### BRANCHES:

45 West 34th St., New York City  
San Francisco  
London



## INTRODUCE US TO YOUR FRIENDS

WE will be pleased to send a free, postpaid sample copy of CAMERA CRAFT to any person whose name and address is submitted to us by a reader. Kindly send us the name and address of your friends who are interested in photography and we will earn you their thanks. You will have our thanks as well. In this way you can help to increase the wide circle of usefulness which CAMERA CRAFT enjoys.

Just Drop us a Card Containing  
the Names and Addresses of Your  
Friends Interested in Photography

## CAMERA CRAFT

CALL BUILDING

**SAN FRANCISCO**

Please Mention Camera Craft when Corresponding with Advertisers.



# Our Clubbing Offers

Canadian and Foreign Postage rates vary with the different Magazines.



|  | Our Price. |          |
|--|------------|----------|
| CAMERA CRAFT . . .   | \$1 00     | } \$1.50 |
| Sunset Magazine . . .  | 1 50       |          |
| Three Sunset Indian Posters,<br>22x28 printed in 2 colors<br>or any other one of the following |            |          |
| Designer . . .   | 75         |          |
| Photographic News . . .  | 1 00       |          |

|                                   |        |          |
|-----------------------------------|--------|----------|
| CAMERA CRAFT . . .                | \$1 00 | } \$1.70 |
| Esperanto and . . .               | 1 00   |          |
| Full Text Book of Esperanto       | 1 00   |          |
| or any other one of the following |        |          |
| American Boy . . .                | 1 00   |          |
| Delineator . . .                  | 1 50   |          |
| Metropolitan . . .                | 1 50   |          |
| Pacific Monthly . . .             | 1 50   |          |
| Pictorial Review . . .            | 1 00   |          |
| Success . . .                     | 1 00   |          |

|                                   |        |          |
|-----------------------------------|--------|----------|
| CAMERA CRAFT . . .                | \$1 00 | } \$1.95 |
| Good Housekeeping . . .           | 1 50   |          |
| or any other one of the following |        |          |
| Ainslee's Magazine . . .          | 1 50   |          |
| American Magazine . . .           | 1 50   |          |
| American Photographer . . .       | 1 50   |          |
| The Camera . . .                  | 1 50   |          |
| Cosmopolitan . . .                | 1 50   |          |
| Etude . . .                       | 1 50   |          |
| Everybody's . . .                 | 1 50   |          |
| Hampton's . . .                   | 1 50   |          |
| Housekeeper . . .                 | 1 50   |          |
| McClure's . . .                   | 1 50   |          |
| Photo Era . . .                   | 1 50   |          |
| Photographic Times . . .          | 1 50   |          |
| Popular Electricity . . .         | 1 50   |          |
| Technical World . . .             | 1 50   |          |
| Woman's Home Companion            | 1 50   |          |

|                               |        |          |
|-------------------------------|--------|----------|
| CAMERA CRAFT . . .            | \$1 00 | } \$2.50 |
| Bulletin of Photography . . . | 1 75   |          |
| or                            |        |          |
| Physical Culture . . .        | 1 50   |          |

|                    | Our Price. |          |
|--------------------|------------|----------|
| CAMERA CRAFT . . . | \$1 00     | } \$3.00 |
| Delineator . . .   | 1 50       |          |
| Everybody's . . .  | 1 50       |          |
|                    | \$4 00     |          |

|                             |        |          |
|-----------------------------|--------|----------|
| CAMERA CRAFT . . .          | \$1 00 | } \$3.00 |
| The American Magazine . . . | 1 50   |          |
| Woman's Home Companion      | 1 50   |          |
|                             | \$4 00 |          |

|                                   |        |          |
|-----------------------------------|--------|----------|
| CAMERA CRAFT . . .                | \$1 00 | } \$3.00 |
| Review of Reviews . . .           | 3 00   |          |
| or any other one of the following |        |          |
| Current Literature . . .          | 3 00   |          |
| Outing . . .                      | 3 00   |          |
| Photo-Miniature . . .             | 3 00   |          |
| Travel . . .                      | 3 00   |          |
| Wilson's Photographic Magazine    | 3 00   |          |
| World Today . . .                 | 3 00   |          |
| World's Work . . .                | 3 00   |          |

|                        |        |          |
|------------------------|--------|----------|
| CAMERA CRAFT . . .     | \$1 00 | } \$3.25 |
| House and Garden . . . | 3 00   |          |
|                        | \$4 00 |          |

|                    |        |          |
|--------------------|--------|----------|
| CAMERA CRAFT . . . | \$1 00 | } \$3.50 |
| Delineator . . .   | 1 50   |          |
| World's Work . . . | 3 00   |          |
|                    | \$5 50 |          |

|                         |        |          |
|-------------------------|--------|----------|
| CAMERA CRAFT . . .      | \$1 00 | } \$3.50 |
| Cosmopolitan . . .      | 1 50   |          |
| Good Housekeeping . . . | 1 50   |          |
| World To-day . . .      | 3 00   |          |
|                         | \$7 00 |          |

CAMERA CRAFT may be added to any combination you want. Get our price. We will also duplicate any combination offered by others and include CAMERA CRAFT for fifty cents additional. } 50 cts.



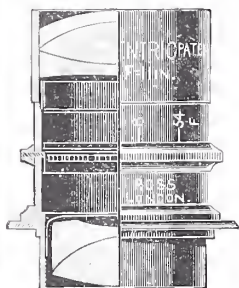
## CAMERA CRAFT

413-415 Call Building

San Francisco, California

# ROSS NEW "TELECENTRIC" LENS

(PATENT)



Giving critical definition at full aperture.

Telephotography with Focal Plane Shutter exposures.

Large image at short camera extension.

An ideal lens for sporting events.

Very suitable for portraiture.

The New Ross "Telecentric" Lens gives a universally flat image to the corners of the plate.

Like the Ross "Homocentric", the Ross "Telecentric" is absolutely free from spherical zones, and negatives taken with it are perfect in detail. The chromatic correction is also perfect. It fills the want so forcibly felt of a lens possessing the sharp definition and other good qualities of the "Anastigmat", and at the same time enlarging the image of distant object.

## PRICES

| Focus—Back-Equiv. | Focus—Back-Equiv. | Focus—Back-Equiv. | Focus—Back-Equiv. | Focus—Back-Equiv. |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| Ins...4 1/2"—9"   | 5 1/2"—11"        | 6"—12"            | 6 1/2"—13"        | 8 1/2"—17"        |
| F 6.8, \$37.50    | \$45.00           | \$48.75           | \$52.50           | \$67.50           |
| F 5.4, 50.00      | 64.00             | 67.50             | 73.00             | 95.50             |

## GEORGE MURPHY, INC.

Manufacturers, Dealers and Importers  
of Photographic Goods

59 East Ninth Street, New York

## Bromide Enlargements BLACK AND WHITE OR SEPIA TONED

To encourage subscribers to make the best use of their negatives we will send, for each subscription of \$1.00 forwarded to us direct for CAMERA CRAFT alone, five coupons entitling the subscriber to a half-price rate on a like number of enlargements.

It is better to order your enlargements unmounted on account of the liability of damage to corners in transit.

These coupons are to be used as follows: They must be sent in before the expiration of the subscription for which they were issued. When you wish an enlargement made, enclose one coupon for each enlargement ordered, with one-half the amount of the regular price quoted below; that is to say, each coupon represents half the price of one enlargement.

### BROMIDE ENLARGEMENTS—REGULAR PRICES FOR GOOD WORK

|                | UNMOUNTED |
|----------------|-----------|
| 5 x 7.....     | \$0.40    |
| 6 1/2 x 8..... | .65       |
| 8 x 10.....    | .75       |
| 10 x 12.....   | 1.00      |
| 11 x 14.....   | 1.25      |
| 14 x 17.....   | 1.50      |
| 16 x 20.....   | 1.75      |
| 18 x 22.....   | 2.25      |

For Sepia add 25 per cent

Address :  
Department C.

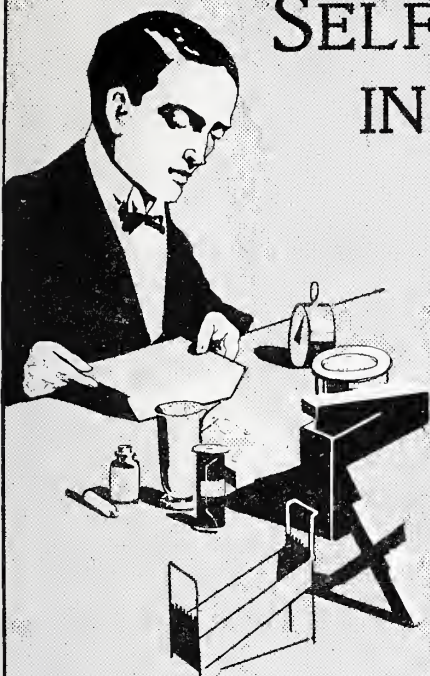
## CAMERA CRAFT

CALL BUILDING

SAN FRANCISCO, CALIFORNIA

Please Mention Camera Craft when Corresponding with Advertisers.






# SELF HELP IN PHOTOGRAPHY

A NEW  
BOOKLET—

“Self-Help in Photography,”  
is packed with helpful, practical,  
money-saving information which  
will be read with profit by every  
amateur photographer.

**GRATIS AND  
MAILED FREE**



*Send a postcard for one to-day, to—*

**BURROUGHS WELLCOME & Co.**  
LIT. DEPT. 35, WEST 33RD STREET, NEW YORK CITY, OR  
LIT. DEPT. 101, CORISTINE BUILDING, MONTREAL  
*Pho 623* *All Rights Reserved*



## LEARN A PAYING PROFESSION

that assures you a good income and position for  
life. For 17 years we have successfully taught

## PHOTOGRAPHY, PHOTO-ENGRAVING, THREE-COLOR WORK

Our graduates earn \$20 to \$50 a week. We assist  
them to secure these positions. Learn how you  
can become successful. Terms easy—living inex-  
pensive. Write for catalogue—NOW.

## ILLINOIS COLLEGE OF PHOTOGRAPHY

L. H. BISSELL, President

907 Wabash Avenue, Effingham, Illinois

Please Mention Camera Craft when Corresponding with Advertisers.



## A FEW OUT OF THOUSANDS

of different combinations and effects that you can get with **THE SEAVEY WINDOW ACCESSORY**. That means that it will pay for itself, over and over, hundreds of times; that it cannot possibly get hackneyed. It brings in new business and increases the orders on regular sittings. It makes your work different and distinctive and does it in an artistic and dignified way. In use it is simplicity itself. The light comes through it and consequently the effect must be perfectly natural, pleasing and convincing. It has nothing in common with the old-fashioned bowered window behind which the sitter was posed and which admitted of no variation. A few samples in your case and you will wish you had secured one of these accessories months ago. Do not delay but write at once for descriptive circulars.

**SEAVEY CO.**

( The greatest firm of Background Makers in the United States )

**HARTFORD BUILDING  
CHICAGO, ILL.**

Please Mention Camera Craft when Corresponding with Advertisers.



# CAMERA EXCHANGE

**I** make a specialty of this branch of the photographic business; have been engaged seventeen years doing so; and, with available stock, facilities, etc., carry it on successfully.

**EASTMAN LINE, BOTH AMATEUR  
AND PROFESSIONAL, CARRIED**

*Estimates cheerfully furnished and  
prompt attention given correspondence*

**Note: Have recently removed to larger  
quarters and more central location.**

## W. F. LYNCH

Telephone Sutter 2055 109 MONTGOMERY STREET

**SAN FRANCISCO, CAL.**

# KODAK FINISHING

—BY MAIL—

Send us your films to be developed, printed or enlarged. We pay the return postage. All work is under our personal supervision. 20 years' experience enables us to get best results.

## NEWBERRY'S

ESTABLISHED 1902

1446 Haight Street San Francisco, Cal.

# PATENTS

Send sketch and description  
for Useful Booklet and Free  
Advice as to patentability.

## MAXWELL STEVENSON

Attorney in Patent Causes

Philadelphia, Penn. Washington, D. C.

*Skilled mechanics in all departments  
insure perfect printing plates.*

## SUTTER PHOTO ENGRAVING CO.

109 MONTGOMERY ST. 919 SIXTH ST.  
SAN FRANCISCO, CAL. ENGRAVES SACRAMENTO, CAL.  
PHONE SUTTER 1244 PHONE MAIN 898

Get rid of what you do not need for something you do!

I buy, sell and  
exchange

## LENSES

and all other  
good

PHOTOGRAPHIC APPARATUS

Let me quote you prices, or on anything else wanted—backgrounds, etc. before buying elsewhere—it will pay you. Bargain list ready in about sixty days.

**RALPH J. GOLSEN 4526 Prairie Ave., Chicago**

## BEST, EASIEST AND CHEAPEST

method of treating prints to  
**PERMANENTLY PREVENT CURLING**

Mailed for 35 cents

Address L. C. BISHOP, 513 Dean Bldg., South Bend, Ind.

## YOU KNOW

A good picture when you see it. Professional and amateur photographers who know use CYKO PAPER exclusively.

WE CARRY A FULL AND COMPLETE STOCK OF ALL GRADES AND SURFACES

Mail Orders Our Specialty. Express Prepaid.

DURATOL, THE NON-POISONOUS, NON-STAINING DEVELOPER

## THE WILTON COMPANY

T. H. Wilton, the old-time Marine Photographer, Manager.

Office: 305 Kamm Building, 717 Market St.

Phone Kearny 2489

SAN FRANCISCO, CAL.

## Get in the Procession !

Please Mention Camera Craft when Corresponding with Advertisers.



**"THE BEST DEVELOPER  
EVER MADE"**

**For Paper, Plates and Films.**

AMATEUR SIZE PACKAGES,  
20-40 ozs. 25 cts; By mail, 30 cts.

*Sample sent free upon request*

**C. L. MITCHELL, M. D.**  
1016-1018 Cherry Street,  
PHILADELPHIA, PA.

## BUY YOUR CAMERAS, KODAKS & FILM FROM US

Also Cyko and Kruxo Paper, Hammer  
and Cramer Plates

Let Us Quote You On Any Outfit

We Will Treat You Square

**J. M. Hamilton Camera Co.**

Waterloo, Iowa

## Goerz Lenses and Cameras

High Grade European and American  
Outfits a Specialty

Lenses and Cameras Exchanged

**ASK FOR UP-TO-DATE BARGAIN LIST**

I invite correspondence on anything photographic

**BUY FROM A RELIABLE INDEPENDENT DEALER**

My name in the photographic world is my guarantee



## ROCK BOTTOM PRICES

**Cameras, Lenses and Photographic Supplies**

Goods Shipped to Any Part of the United States

*SEND FOR BARGAIN LIST*

It will pay you to deal with us. Everything for the  
Amateur and Professional.

**New York Camera Exchange**

109 Fulton Street

New York, N. Y.

## HIGGINS' PHOTO MOUNTER PASTE



*The kind you are  
sure to use with  
continuous  
satisfaction*

**AT DEALERS GENERALLY**

**CHAS. M. HIGGINS & CO.**

BRANCHES:  
CHICAGO  
LONDON

MANUFACTURERS  
271 Ninth St., Brooklyn, N. Y.

## Back Numbers Wanted

Some of our subscribers want back numbers to  
fill out their files for binding. We will list each  
month such numbers as are wanted. Those hav-  
ing back numbers should watch this advertise-  
ment regularly.

|                 |      |                 |      |
|-----------------|------|-----------------|------|
| May .....       | 1900 | December .....  | 1907 |
| June .....      | 1900 | June .....      | 1908 |
| September ..... | 1900 | September ..... | 1908 |
| December .....  | 1900 | December .....  | 1908 |
| February .....  | 1902 | February .....  | 1909 |
| June .....      | 1902 | March .....     | 1909 |
| September ..... | 1902 | April .....     | 1909 |
| July .....      | 1903 | May .....       | 1909 |
| August .....    | 1906 | June .....      | 1909 |
| September ..... | 1906 | December .....  | 1910 |
| November .....  | 1906 | January .....   | 1911 |
| February .....  | 1911 |                 |      |

Send only such issues as are listed above and  
be sure that the reading pages and the frontis-  
piece are complete. In return we will extend  
your subscription twelve months for an issue of  
1900, eleven months for an issue of 1901, ten  
months for an issue of 1902 and so on. Mark the  
wrapper plainly:

**CAMERA CRAFT,**

413-415 Call Building,

Subscription Dept.

San Francisco, Cal.



# YOU'LL BE SORRY

IF YOU DON'T BUY YOUR  
**KORONA OR SENECA CAMERA**  
FROM US

Get our discounts before you place your order. We will also take your old camera or photographic supplies of any kind in exchange. A catalogue and discount sheet of both the Korona and Seneca cameras, 5 cents. Our large 320-page photo supply catalogue with discount sheet for 25 cents. Your money back with first order.

**WRIGHT, PHOTO SUPPLIES Racine, Wis.**

"Just the Information We Need"

## WEBSTER'S NEW INTERNATIONAL —THE MERRIAM WEBSTER

Every day in your talk and reading, on the street car, in the office, shop, and school some new question is sure to come up. You seek quick, accurate, encyclopedic, up-to-date information.

This NEW CREATION will answer *all* your questions with *final* authority. 400,000 Words Defined. 2700 Pages. 6000 Illustrations. Cost \$400,000. The only dictionary with the new divided page. A "Stroke of Genius."

Write for specimen pages, illustrations, etc.

Mention this publication and receive FREE a set of pocket maps.

**G. & C.  
MERRIAM CO.,  
Springfield,  
Mass.  
U. S. A.**



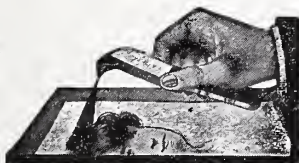
We're doing business at the old stand making and selling the

**Best Art Tool** in the line for good work. Circulars free. Address:

**AIR BRUSH MFG. CO.**

73 Nassau Street

Rockford, Ill., U. S. A.



THE 1912

## ADON TELEPHOTO LENS

is of entirely new mechanical and optical construction. It gives sharp pictures at full aperture, and covers plates from  $2\frac{1}{2} \times 3\frac{1}{2}$  to  $12 \times 15$  inches.

Both combinations of the ordinary lens should be removed, and the Adon screwed direct into the shutter or flange on the camera. At the same extension as usual the Adon then gives a picture three times the size, and at longer extension 4, 5, 10 and higher magnifications. It covers a  $3\frac{1}{4} \times 4\frac{1}{4}$  plate at  $5\frac{1}{2}$ ", a  $4\frac{1}{4} \times 6\frac{1}{2}$  at  $7\frac{1}{2}$ " extension, and larger plates at proportionately greater extensions. There is no difficulty in using it.

*Order from your dealer.  
Free Illustrated Catalogue.*

## Burke & James

INCORPORATED

240-246 E. Ontario St.

CHICAGO

SOLE U. S. AGENTS



Please Mention Camera Craft when Corresponding with Advertisers.

# EURYPLAN — THE WONDER LENS —

THE ONLY SYMMETRICAL HIGH-SPEED ANASTIGMAT

SERIES Va. F:4.5

Single Combination, F:8.5, Doubles Size of Image. Four Lenses in One. Two Foci.  
Extreme Speed Portrait, Landscape, Wide-Angle, Telephoto.  
No Air Spaces to Reflect. Maximum Illumination.

**RALPH HARRIS & CO.**

SOLE AGENTS FOR THE UNITED STATES

26-30 Bromfield Street, Boston

108 Fulton Street, New York



**L. J. STELLMANN, Agt.**

1017 Vallejo Street

SAN FRANCISCO, CAL.

Telephone Franklin 3566



## PRIZES \$5.00 \$2.50 \$1.00



CONTINUING with Example No. 2, shown on Page 15 and with method of making described on Page 13 of my "COMPLETE EXPOSURE METHOD AND HOME PORTRAIT HELPS", monthly prizes as above are being awarded for the best three examples of home portraiture made according to the instructions given. The first contest, the present one, closes on June 30th; the second, on Example No. 2, will close July 31st, and so on.

If you have not yet secured a copy of the book, get one of your dealer or send seventy-five cents direct to F. M. Steadman, Box C, Concord, N. H. Better, send one dollar and an Aaba Exposure Scale, together with note book all ready for measuring the light and sample showing "least visible tint" will be included.

Make a portrait like Example No. 2 in the book, one with the subject placed as directed, and send it in. You may win a prize. On the back of each print must be given the following data: Tint time of the light. Subject factor as per table on page 28. Name of plate or film used, with its speed stop. Exposure with speed stop. Stop actually used and exposure given. Name and address of the maker of the picture.

Send only unmounted prints, no letter; and, as Mr. Steadman is constantly moving, address the wrapper as below.

### Steadman Home Portrait Contest

Care CAMERA CRAFT, 415 Call Bldg.

San Francisco, Cal.

## MOVING

We moved to 810 Broadway, May 1st.  
Send stamp for Removal Bargain List No. 123.

**WILLOUGHBY**

810 BROADWAY

NEW YORK CITY

## Art Studies

PHOTOGRAPHS FROM LIFE MODELS

Finest Collection for Artists  
and Art Lovers

Illustrated Catalogue sent free on demand

**C. KLARY** 103 Avenue de Villiers  
PARIS (FRANCE)

Please Mention Camera Craft when Corresponding with Advertisers.





# CAMERA CRAFT

A Photographic Monthly

Entered at the Postoffice in San Francisco as Second-Class Matter. Copyrighted, 1912, by Fayette J. Clute.

## CONTENTS FOR JUNE, 1912

|   |                        |
|---|------------------------|
| Miss W. A Home Portrait (Frontispiece).....   | F. Morris Steadman     |
| How I Became a Camera Fiend.....  | John F. Fensel 245     |
| A Unit Method in Photography.....   | F. Morris Steadman 249 |
| Fifth Annual Convention.....  | Le Roy Kellogg 257     |
| Secrets of Success.....   | Le Roy Kellogg 258     |
| Instantaneous Toning of Solfo, Etc.....   | David H. L. Wills 260  |
| A Convenient Method for Some Subjects.....  | V. A. Ulrich 263       |
| An Inexpensive Method of Binding.....   | A. C. Bevis 265        |
| Aerial Photography.....   | 267                    |
| Some Stereoscopic Hints Worth Recording.....  | James B. Warner 268    |
| Paragraphs Photographic.....  | 271                    |
| A Practical Vignetter—How I Made a Lens Cap—An Adjustable Mask—Self-Measuring Bottle—Opportunities That Are Overlooked Orthochromatic Development—Reviving Leather—Improvised Kits.   |                        |
| Editorials.....   | 275                    |
| A Tendency to be Avoided—The London Salon.  |                        |
| A Photographic Digest.....  | 277                    |
| A New Method of Color Photography—Blocking Out Skies—Line Drawings From Prints on Bromide or Printing-Out Paper—Copying Paintings in Galleries—Brown Tones by Development of Gas-light Papers—White of Egg for Mounting by Hot Pressure—Shorter Exposure Time for Autochromes—Discolored Platinum Prints. |                        |
| The Amateur and His Troubles.....   | 281                    |
| The Picture Space—Being Business-like.  |                        |
| Our Book Shelves.....   | 283                    |
| International Photographic Association.....   | 284                    |
| Notes and Comment.....  | 285                    |

**Expirations**—Subscriptions to Camera Craft are discontinued on date of expiration. The date on the address label on the wrapper shows the time to which each subscriber has paid. Thus: Nov. 09 means that the subscription expires with the number dated November, 1909. **Renewing**—In renewing a subscription, do not fail to say that it is a renewal, giving name and address just as now on the address label. **New Address**—In notifying us of a change of address, give both the old and new address. Should you miss a copy through change of address, advise us of the fact, and another will be gladly sent. **Dealers**—All photographic supply dealers and news dealers are authorized to receipt for subscriptions in our name.

Subscription Price, \$1.00

Canada, \$1.25

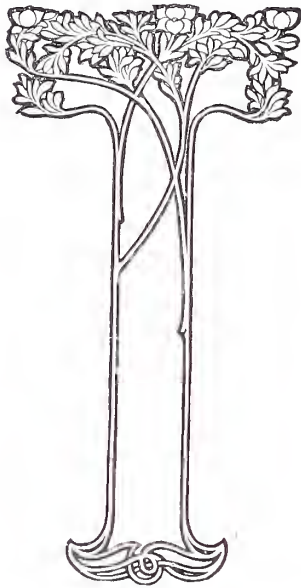
Foreign, \$1.50

### FOREIGN AGENTS:

|                              |  |
|------------------------------|--|
| Canada . . . . .             | United Photographic Stores, Ltd., Montreal |
| Mexico . . . . .             | Calpini y Cia., Mexico City                |
| Philippine Islands . . . . . | Squires, Bingham & Co., Manila             |
| New Zealand . . . . .        | H. I. Jones & Co., Ltd., Waganui           |
| Australia . . . . .          | Kodak Australasia, Ltd., Sydney            |
| Japan . . . . .              | Harringtons, Ltd., Sydney                  |
|                              | S. Kuwada & Sons, Osaka                    |

# EVERY PHOTOGRAPHER

realizes the importance of having plates  
and papers fresh and chemicals pure.  
Send a trial order, any brand or any make  
—you'll be pleased with our service.



## HIRSCH & KAISER

218 POST STREET  
SAN FRANCISCO, CAL.

Please Mention Camera Craft when Corresponding with Advertisers.







MISS W.  
BY F. MORRIS STEADMAN.



---

# CAMERA

---



---

# CRAFT

---

---

A PHOTOGRAPHIC MONTHLY

FAYETTE J. CLUTE, Editor and Proprietor

CALL BUILDING

SAN FRANCISCO

CALIFORNIA

---

VOL. XIX

JUNE, 1912

No. 6

---

## How I Became A Camera Fiend

By John F. Fensel, I. P. A. 2894



---

With Illustrations by the Author

---



MY SISTER-IN-LAW POSES AS A MILKMAID

correspondence, he received the printing press that he wanted and I found myself the proud possessor of a  $3\frac{1}{2} \times 3\frac{1}{2}$  Eastman plate camera, two loaded plate holders, a package of developer, one of hypo, and an instruction book.

VISITING us, during the winter of 1904, was my sister-in-law. Telling her about a neighbor who had a camera and was making good pictures, she expressed a desire to have him come over and exercise his skill in making some views which she wanted; but the gentleman was too busy husking corn to permit. But that sister-in-law had to have the pictures. I put an advertisement in one of the papers, offering to exchange a small printing press I had for a camera. Among the answers was one from a man near Indianapolis; and, after some

## CAMERA CRAFT

I read the book through, acquiring, as I afterwards learned, about as much knowledge of taking pictures as a hog has of Latin. But I thought I knew it all. I put one of the holders in the camera, went out and located my pet sheep in the view finder, and snapped the shutter. It was all so easy. Then I hiked over to my corn-husking friend and enlisted his assistance in "doing the rest." He invited me into his dark-room, took the holder out of the camera, withdrew the slide, and for the first time I saw a photographic plate. I asked him if that slide had to be pulled out before making the exposure, and he said, "Yes." I had not done so. "Well," he said, "you have exposed your ignorance instead of a plate," and his uproarious laughter led me to believe that my mistake was considered humorous. However, he eventually quieted down and told me in detail just how to perform with the camera.

I proceeded home, feeling sure I had acquired such a full mastery of the details that I could cope successfully with the charms of my dear sister-in-law and gratify her desires as to their successful portrayal. I posed her standing in a doorway between two rooms, a large window back of her and in direct line with the camera, so that there was plenty of light. My sister-in-law is a good girl,—she deserves a halo, and she got it in the resulting picture, all right. I felt a little squeamish about photographing these invisible auras, and as those who were not aware of the saintly character of my sister-in-law persisted in blaming it on my lack of photographic skill, I sought a subject less liable to show such manifestations. The next picture should be of my wife.

She wanted it to be a bust picture, so I brought the camera up to within about three



BUSY HUSKING CORN

feet of her face, where the head and shoulders filled the finder fairly well, and again snapped the shutter. The camera was a fixed focus one, not capable of giving a sharp image of anything nearer than five or six feet; and, as I then knew nothing about artistic photography, I promptly threw the resultant negative away. The cow was the next victim, but whether she escaped before I snapped the shutter, or afterward, I never found out. She was certainly not on the plate, because we could only find the side of the barn when my neighbor put it through the developing process. The fourth and last plate was snapped



## HOW I BECAME A CAMERA FIEND

on one of my horses, firmly tied so that he could not get away, but even then I only got the head coming in from one corner. I had used my four plates without making a single good picture.

But I was not entirely discouraged. I bought a lot of supplies and went at it again. By practice and with more instruction gathered from my neighbor when he was not too busy husking corn or displaying his wonderfully keen appreciation of a joke, I gradually reached a stage where I could make some fairly good pictures. Being desirous of making my hobby pay its way if possible, I solicited work from my neighbors at one dollar per dozen for the



A PIONEER INDIANA PLOWMAN

$3\frac{1}{2} \times 3\frac{1}{2}$  prints, mounted. I soon made over fifty dollars without allowing the work to interfere with my farm duties, and began to think I was quite a photographer. I sent to a mail order house and got a new camera,  $4 \times 5$  size, but there was something the matter with the shutter; it would either open promptly and then forget to close, or it would become so absorbed that it would entirely forget to open when the pressure of the bulb was given as a signal for it to do so. Its eccentricity lost me several good jobs; people had little patience with its uncertain behaviour, so I traded it off and bought a  $4 \times 5$  Eastman Kodak and a Kodak enlarging camera.

With these I turned out good work and did a good business. There was quite a demand for  $6\frac{1}{2} \times 8\frac{1}{2}$  bromide enlargements at fifty cents each, and that led me to believe I should have a larger camera. One was bought; and, when I got behind that camera with the focusing cloth over my head I felt that I was a professional photographer for sure. An opportunity to exchange places with President Taft would have had scant consideration from me. I was in the



WHERE FISHING IS GOOD

heights of my glory,—if the plate would only turn out all right when I came to develop it. And I was getting along so well that it usually did.

But I soon discovered that being a professional photographer had a few drawbacks. The horses were needed on the farm, and walking to make a photographic call, carrying about twenty-five pounds of photographic paraphernalia, was not the greatest pleasure. So I traded the Kodak for a 5x7 Premo and found the latter much lighter than my "view" outfit, and capable of making just as good pictures, even if the pictures were views. The lens that came with the camera, a rapid rectilinear, was discarded for a Velostigmat, a lens which has given me the best of satisfaction on account of its definition and covering power and the roundness of the image produced. The only thing that bothers me is this: Since spending all my own spare cash and some of my wife's butter money to buy this lens, I have found that only fuzzy pictures are artistic; even the makers of my Velostigmat are busy teaching us poor ignoramuses that fact and advising us to buy a soft working lens. They certainly imposed upon me when they sold me the one they did. Perhaps, however, they did not themselves know the merits of the fuzzy work at the time.

---

The sound and proper exercise of the imagination may be made to contribute to the cultivation of all that's virtuous and estimable in the human character.—ABERCROMBIE.



---

# A Unit Method In Photography

By Frank Morris Steadman



---

With Illustrations by the Author

---

At the present time we have practically but one term by which to express light intensity, *i. e.*, candlepower, a term based on the illuminating power of light radiating from a small surface. As a measurement it is useful in expressing the illuminating power of artificial lights used for illuminating purposes, but it can hardly be employed to designate the amount of light reaching an object or surface from a source of light such as the open sky.

The candlepower of a light, it might be well to explain, is determined or ascertained in the following manner: Two small, adjacent suitable surfaces are illuminated, one by a standard candle at a standard distance, and the other by the light to be measured. This latter is retired from the apparatus or photometer to such a distance as will cause the luminosity of the test surface upon which it shines to just equal that of the adjacent one illuminated by the standard or unit candle, located at the standard distance. The equalization of the two luminosities is determined by the vision; the candlepower of the light being tested is then calculated on the basis of the well-known law of inverse squares. This law can be stated as follows: The intensity created by a small light source is in inverse ratio to the square of the distance therefrom. It follows that the intensity of two lights, arranged as described above, will be in direct ratio to the square of their distances from the illuminated surfaces. For example, an incandescent electric light which, at four feet, equalizes the illumination of the standard candle at one foot, would have the square of four, or sixteen, candlepower.

Candlepower, as a unit of measurement, is seen to have a special application and one not at all suited to the needs of the photographer. Rarely is a



MISS H.—Tint Time, 2 seconds: Subject Factor,  $\frac{1}{4}$ ; Exposure, 1 second with Speed Stop U. S. 32; Exposure given,  $\frac{1}{2}$  second with U. S. 16.

## CAMERA CRAFT

photographer called upon to photograph the source of an artificial form of light, or even a subject lighted therefrom; and, should he be so requested, knowing the exact candlepower of the light would aid him but little, because candlepower would express visual, not chemical, intensity.

Let me quote two paragraphs from the manuscript of my new book, "A Unit Method in Photography," soon to be published:

"A NEW PHYSICAL QUANTITY: We are endowed by nature with what may be termed a sense of quantity values, and it is this sense that is gratified by the possession and use of definite terms of measurement."

"In order to apply such knowledge as can be gained from exact measurements, to the practice of photography, it becomes necessary to accept a name, one not heretofore employed, to describe a common property of light, a property capable of measurement, namely, actinic. This can be defined as the property of light radiation to produce certain chemical action upon converging at a point. This property is possessed by light radiating from any surface, be it that of the sun or

that of some quite invisible object. Until it be understood that each surface, each object, as it comes before the lens, has, in its radiation of light from its different planes, actinic of a measurable amount, and that these amounts are expressible in simple numbers, the problem of correct photographic exposure cannot be dealt with in a scientific and exact manner."



A CARNIVAL FAVORITE.—Tint Time, 8 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure, 4 seconds with Speed Stop U. S. 32; Exposure given,  $\frac{1}{2}$  second with U. S. 4.



## A UNIT METHOD OF PHOTOGRAPHY

It is seen from the above that the definition of the new term, actinicity, is based upon the chemical power of light rays converging at a point; and, in being so based, is diametrically opposite, in theory, to that upon which is based the candlepower determination of a small light source, the latter considering a point which radiates light outward.

It seems quite logical to think of the sky above as a dome of atmospheric form, from every part of which light radiates, independently, upon each surface point that is presented upward to it. Leaving our instruments for the determination of candlepower, and going directly to nature, one realizes that light radiating outward from a small light source, to be returned from the different points or small areas making up every visible surface, go to a multiplicity of such surfaces of different colors and at different distances, making the exact amount of the actual work done practically undeterminable. On the contrary, there is a sense of completeness in the assumption that each point of every visible surface about us is illuminated, and actinified as well, by the convergence upon it of light rays from the entire hemisphere of sky that may confront it.



IN DUTCH COSTUME.—Tint Time, 4 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure, 2 seconds with Speed Stop U. S. 32; Exposure given,  $\frac{1}{4}$  second with U. S. 4.

Radiated light is dissipated and cannot be accounted for, converging light creates a definite effect, does a certain amount of work that can be observed and measured easily. In the production of photographic lenses, this theory of convergence has always been recognized and applied in the notation of the stops as related to the speed of the lens, stop f-16 for example, denoting the amount of

## CAMERA CRAFT

convergence of the cone of light it admits to the plate, irrespective of the focal length of the lens. Every f-16 stop, used in the lens for which it is designed, admits the same cone of light, be its actual diameter what it may, varying in accordance to the different focal lengths of different lenses. This measurement of convergence, of cones, is the true and logical basis for the calculation of light value, and it is just as applicable to natural conditions of light in the open as it is to lens efficiency.

I will outline, as clearly and briefly as possible, my unit system. The stop or cone form, f-64, is taken as the unit, larger cones of light being designated by multiples of this unit as their volume or "solid angle" increases. In the following table will be found the unit value of the regularly used stops, showing their relation to the F and the U. S. systems of numbering:

|               |     |     |    |      |    |      |    |     |     |
|---------------|-----|-----|----|------|----|------|----|-----|-----|
| Unit value    | 1   | 2   | 4  | 8    | 16 | 32   | 64 | 128 | 256 |
| F. numbers    | 64  | 45  | 32 | 22.5 | 16 | 11.3 | 8  | 5.6 | 4   |
| U. S. numbers | 256 | 128 | 64 | 32   | 16 | 8    | 4  | 2   | 1   |

Adopting the unit system, one has but to understand that it numbers the lens stops in accordance with their actual working capacity, that is, No. 1 is a certain small stop having one-fourth the capacity of No. 4. This understood, no further explanation is required, problems of exposure being easily calculated according to our conceived idea of cause and effect. For example, if one man requires sixty-four minutes in which to do a certain amount of work, four men should do it in one-fourth of sixty-four minutes, or sixteen minutes. Such a problem being calculated in numbers as they are rationally used. One for one object, as one man or one minute; four for four men, sixty-four for sixty-four minutes, and so on. With the unit system of numbering stops it is the same; if stop No. 1 requires sixty-four seconds to do a certain amount of work, to make



MISS R.—Tint Time, 8 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure, 4 seconds with Speed Stop U. S. 32; Exposure given,  $\frac{1}{2}$  second with U. S. 4.

a correct exposure stop four will do it in one-fourth of sixty-four, or sixteen seconds.



## A UNIT METHOD OF PHOTOGRAPHY

So irrational are the present systems of numbering stops, despite their conforming in a measure to the theory of light convergence, that, in the U. S. system, the No. 4, instead of denoting, as numbers should, one-half the value of No. 8, denotes double that value. In the F system, four indicates, not one-half, but four times the value indicated by eight. Of course, these notations can be successfully used in practice if they are understood by the photographer. The trouble with them lies in their having to be especially explained, with the result that there are thousands of photographers who have no conception of the meaning of F values or of the U. S. system of stop numbering. What is quite generally understood is this: Each stop has double the power or efficiency of the next smaller one in the series; and so, in spite of the misleading numbers, they go directly to the values and make the exposures on the basis of halving them as they increase the size of the stop and doubling them as they reduce its size. The adoption of a simple unit scale would furnish an immediate solution of the problem, and furnish a system easily understood by all.



YOUTH AND BLOSSOMS.—Tint Time, 4 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure, 2 seconds with Speed Stop U. S. 32; Exposure given,  $\frac{1}{4}$  second with U. S. 4.

The actinicities of surfaces is really the great problem in photography, that is, photography as an exact science. And yet, no serious effort has been made to unify that important factor. My own unit of actinicities is called the "actino," a degree of actinicities that will create a least visible tint on the emulsion of a dry plate or film, in one minute, working at a convergence of f-1, or four thousand and ninety-six cone units. In order to measure the actinicities of a surface, a meter having an f-1 aperture must be constructed. Procure a small pasteboard box such as druggists use, and cut a circular hole in the lid, a hole having a diameter equal to the depth or thickness of the box. Opposite the center of this hole, cut another smaller and somewhat irregularly shaped hole, about a quarter of an inch in diameter, in the bottom of the box. From a Brownie sized roll of film, one containing no orthochromatizing dye, cut some



## CAMERA CRAFT

small strips to be used under the smaller hole to receive the light acting through the larger aperture in the top of the box. This completes the meter.

Two conditions must be observed in measuring the actinicity of any given surface. The meter must be held a little nearer to the surface under consideration than the least width of such surface, so that the light from such surface will completely fill the  $f-1$  angle of the meter. The area of the surface under consideration must be of uniform actinicity throughout; otherwise the result would be a registration of a number of different actinities instead of one only. In a very subdued light place a strip of the film against the bottom of the box so as to cover the small hole therein, meanwhile keeping a coin over the larger hole in the top. After backing the film strip with a piece of flexible black or opaque paper, hold the box in its correct position with regard to the surface



MISS R.—Tint Time, 8 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure, 4 seconds with Speed Stop U. S. 32; Exposure given,  $\frac{1}{2}$  second with U. S. 4.



MISS M.—Tint Time, 8 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure, 4 seconds with Speed Stop U. S. 32; Exposure given,  $\frac{1}{2}$  second with U. S. 4.



MISS A.—Tint Time, 16 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure given, 1 second with U. S. 4.

being measured; that is, so that the light from the surface will enter the large hole in the top of the box and act upon the film beneath the smaller hole in the bottom, when the coin is removed. Slide the coin aside and allow the light to enter the meter for a period of time that, by previous trials, may be thought to create a "least visible tint" on the exposed part of the strip of film. The time given should be one of the following intervals, intervals increasing in a progressive ratio, as one-fourth, one-half, one, two, four, eight, sixteen, thirty-two, and so on, seconds. Sixty-four seconds can be considered as interchangeable with one minute, the difference being negligible. These intervals preserve the geometrical progression and their divisions are sufficiently exact to fill all the requirements of correct exposure. As has been explained, should an exposure

## A UNIT METHOD OF PHOTOGRAPHY



A CARNIVAL QUEEN.—Tint Time, 32 seconds; Subject Factor,  $\frac{1}{2}$ ; Exposure, 16 seconds with Speed Stop U. S. 32; Exposure given, 2 seconds with U. S. 4.

of sixty-four seconds, or one minute, create a tint on the film, while thirty-two seconds fails to do so, the surface would be said to have one "actino" of actinicity. Should a test with the meter prove that a given surface reflects sufficient light to create a tint in two seconds instead of one minute, that surface's actinicity can be said to measure thirty-two "actinos," since it did the work in one thirty-second of the time required for a unit actinicity to do it.

Should the reader wish to try out this system of light measurement, it will be found quite convenient to fasten the box, by means of glue or a little gummed paper, to the cover of a pocket notebook that is already fitted for

## CAMERA CRAFT

measuring the light as directed in my "Complete Exposure Method and Home Portrait Helps," using the hole in the cover of the notebook for tinting the film instead of the one in the bottom of the box. In this case the hole in the bottom of the box should be larger than the one in the cover of the book, so as not to obstruct the light from the latter. The box can be painted or tinted black inside with ink, and the lid glued on. The tinting strips of film can then be placed under the hole in the book cover as advised for the printing-out paper and film strips in the original book method of measuring the light. In measuring very bright surfaces, such as the sky or a white house in full sunlight, it is advisable to use Solio or some like paper instead of the film, dividing the tinting time so found by eight, thus reducing it to the tint time for film, which latter tints in one-eighth the time of the former, and too fast for accurate timing when measuring very bright expanse of surface.

By this unit method, the sky, with high sun, measures five hundred and twelve actinos. The sun's own surface, when it is about thirty degrees high, and with the atmosphere clear, measures approximately sixteen million actinos. A white house, from the shady side but the day bright, will measure about one hundred and twenty-eight actinos. About three feet inside of an ordinary window, the face of a person of average complexion measures from four to sixteen actinos, and so on.

Having settled, with sufficient accuracy, the numerical designation of both the lens stops and the actinicity of surfaces, the speed of the various plate and film emulsions may then be indicated in time units. The speed time of any given emulsion is the time required to secure a correct or normal exposure, using unit stop one, upon a surface having one actino of actinicity; or, with unit conditions of stop and light power. For example, Cramer Crown plates, tested by this method, have a speed of four minutes.

A practical example will illustrate each step in the work. Suppose that it be desired to take a portrait by a window, using a Cramer Crown plate. The face, on measuring the light entering the meter from one of the setter's cheeks, is found to create the least visible tint on the film in four seconds. Sixty-four, the time for one unit actinicity, divided by four, indicates sixteen actinos for the face. It being known that, with the face measuring one actino, the exposure would be four minutes with the Cramer plate, using stop one of the unit system, it is plain that with the face measuring sixteen actinos the exposure will be one sixteenth of four minutes or sixteen seconds. Now, since sixteen seconds exposure would be required with the unit stop or stop one, stop sixteen would require one-sixteenth of sixteen seconds, or one second. Stop thirty-two, would require only one half second, and so on.

The manuscript of this book has been used for class work in the University of Pennsylvania for the last two years. A number of prominent scientists look upon the system inaugurated therein as being not only correct in theory but the first ever devised that was suitable for popular study of light and light action. It is, at the same time, a practical, physical solution of many of the problems met in photographic practice.



---

# Fifth Annual Convention

## The Inter-Mountain Photographers' Association

By LeRoy Kellogg, Secretary-Treasurer



The Inter-Mountain Association passed, April third to sixth inclusive, another milestone, one which marks the most successful convention it has yet held. Perhaps not the largest in the matter of numbers, but the most practical and business-like one. Every minute was occupied with something beneficial to the photographer.

President Dean delivered the welcome address, followed by a discussion, "What Brand of Brains Does the Successful Photographer Require?" After a lengthy debate, it was agreed that he must have a vast quantity of the afore-said brains of a quality sufficient to make him both an artist and a business man. In the evening the members, their wives and friends, enjoyed an instructive illustrated lecture on color photography, by Mr. Lawrence Ossen, of Denver Colorado, followed by two hours of social dancing.

Thursday morning was taken up with especially interesting lectures on "Success," by J. C. Abel and George Holliway. The afternoon was devoted to demonstrations by Harry Fell and assistants on the various products of the Eastman Kodak Company. It was well attended and was certainly one of the most instructive features of the convention. In the evening the members and their wives enjoyed an exquisite banquet at the Centennial Commercial Club.

Friday morning was devoted to a lecture on advertising, by J. C. Abel, of *Abel's Weekly*. Mr. Abel certainly has advertising principles down to a fine point. He was followed by George Holloway, with the best talk yet, his lecture on "Personality versus Individuality." Mr. Holloway illustrated his lecture with one hundred portraits of himself, made by as many prominent photographers of this country. He also demonstrated his practical method of judging prints, which is very good indeed. The afternoon was taken up by Mr. Whiteman with his splendid demonstration for the Ansco Company. This was followed by another lecture on business methods, by Mr. Abel; and, by special request, Mr. Ossen repeated his exhibition of color slides.

Saturday morning was entirely devoted to the election of officers for the ensuing year. J. F. Rabe, of Utah, was made President; LeRoy Kellogg, of Denver, Secretary-Treasurer; and Vice-Presidents from the various States, as follows: Mrs. Girvy, Idaho; Mr. Patrick, Colorado; Mr. Galligar, Nevada; Mr. Jukes, Wyoming, and Mr. Christionsen, Utah.

The exhibits were not as numerous as last year, but the quality of work, as a whole, far excelled that of any previous convention. R. C. Nelson, of Hastings, Nebraska, was awarded the Prize Cup for the three best prints entered in the Grand Portrait Class. Frank Griffith, of Salt Lake, received Salon Honors.

The manufacturers and dealers represented were: Denver Photo Material Company, Salt Lake Photo Supply Company, Savage Supply Company, Utah Photo Material Company, Ossien Photo Supply Company, Hammer Dry Plate Company, Ansco Company, California Card Company; and, last but not least, the Eastman Kodak Company, represented by Harry Fell, the one convention man in a class of his own, always ready and willing to do all in his power to make a success of any convention. Both Mr. Rose, the Hammer man, and "Bill" Stuart, representing Seed plates, made themselves invaluable, not only with their suggestions, but with their assistance.



## Secrets of Success

By LeRoy Kellogg, Secretary-Treasurer



---

An Address Before the Last Inter-Mountain Convention

---

In this day and age there is so much said about secrets of success. But really, these so-called secrets are simply principles, principles that were created in the beginning and that will continue through time. No truer statement was ever made than that. "There is nothing new under the sun." Neither you nor I can change these principles one iota. The beautiful thought is, that these principles are our inheritance, free as the air we breathe and is impossible of being monopolized by any one person. And he who adopts them is rewarded with success and eminence.

You ask, what are these success principles. The first and foremost is education along the line you wish to follow. Education alone is useless unless you adapt it to your business. And of almost equal value is perseverance. It is very easy to become discouraged, for, unfortunately, the photographer, like the musician, artist, or other professional man, has two distinct goals to which he aspires;—The professional and the financial. He is not like the banker or other commercial man, who has only the financial goal in view.

A merchant would be an absolute failure as a photographer until he adopted the principles of photographic success. The educator is a success as a teacher just to the extent to which he has adopted the ever-governing laws governing education. A man who adopts the laws cannot fail of success, for the minute he adopts them he is a success; success becomes a part of him, no handicap of origin or environment can keep him from it.

I know of a colored photographer in the South who, in spite of his race, gets the highest prices and the patronage of the best people in his city. It is not his personality; he has grasped the principles of success. So you can see there are really no secrets of success; simply these principles, our inheritance, given to us in the beginning by our Creator, and all we have to do is to apply them.



ONE OF THE SET OF THREE  
WINNING PRIZE CUP GRAND PORTRAIT CLASS  
FIFTH ANNUAL INTER-MOUNTAIN CONVENTION  
By R. C. NELSON, HASTINGS, NEBRASKA



---

# Instantaneous Toning of Solio, Etc.

By David H. L. Wills



In spite of the perfection to which developing papers have been brought in the last few years, there are very many amateurs who prefer and almost exclusively use solio and other printing-out papers, P. O. P. as they are called by our friends across the ocean. The developing papers are widely advertised as "The Papers for Busy People," but my experience has taught me not to undertake to make even a few prints upon them unless I can see at least an hour free from interruption ahead of me; while, on the other hand, with printing-out paper I can see, in five minutes of early sunlight, every detail that is in the darkest shadows of my dried-over-night negatives. I can, also, using printing-out paper, fill several frames and leave them, in a rather shaded place of course, until I come home at evening, without fear of over-printing. With this paper I seem able to get more detail in the shadows than with any other paper, and if care is used in the selection of the surface upon which to squeegee the prints, —ferrotype metal, smooth plate, or coarse or fine ground glass,—the finish can be adjusted to almost any effect that may be desired.

For years the toning bath was a serious drawback, particularly the long preliminary washing, which, if not carefully and slowly done, was sure to leave spots and stains that spoiled many of my best prints. As a welcome relief from this, I used for three years the simple combined bath so long advocated by Dr. Nicol, of the old *American Amateur Photographer*. The results were quite satisfactory as to permanency, but I was never quite certain of obtaining just the tone I wanted.

About a year ago a formula came to me from Europe, one which, after some experimenting and modifications, has proved to be so thoroughly satisfactory in every respect to myself and to the many friends to whom I have given it, that I now lay it before CAMERA CRAFT readers with the utmost confidence in its convenience, its economy, and the beauty and permanency of its results. I can assure all who will faithfully try it a beautiful, rich, and always uniform tone, on Solio, within thirty seconds after leaving the printing frame; and, withal, absolute permanency. I have exposed prints to direct sunlight for three months, with one-half covered by black paper, and cannot now see the line between the covered and the uncovered parts.

For the professional it may be found expensive, in that it uses a little more gold than the old baths, but that need not be considered even by the most economically minded amateur. It is such a small percentage of his expense; and, as a matter of fact, it has cost me in the year I have used it exclusively considerably less than old bath did. Even with the combined bath, it is impossible to avoid waste; while with this, one need not waste one grain of gold in ten years. One pours from his four bottles of perfectly stable solutions, each

## INSTANTANEOUS TONING OF SOLIO, ETC.



A BEND IN THE RIVER

By JOHN F. FENSEL

time just exactly sufficient, and no more, to tone four, ten or fifty prints, or as many as he has ready, using it to the last drop. There is no room for waste. That is economy itself. There are only four chemicals needed. They are cheap, and to be had from any stock dealer and in small quantities. They should be carefully dissolved in clean bottles and mixed in the proportion and order as follows:

- A—Ten per cent solution of sulpho-cyanide of ammonium.
- B—Fifteen grains chloride of gold in seven and one-half ounces water.
- C—Ten per cent solution of phosphate of soda.
- D—Saturated solution of borax.

To use, take in the following order:

|             |         |
|-------------|---------|
| A .....     | 1 dram  |
| Water ..... | 8 drams |
| B .....     | 4 drams |
| C .....     | 1 dram  |
| D .....     | 2 drams |

There is no preliminary washing. Print just a shade deeper than you wish the finished prints to be, and put them direct from the frames into the prepared bath. They may, if desired, be kept a week or two in a dark place. They will, in the bath, turn at first red, but in less than thirty seconds they will change to a beautiful dark purple, almost black in the shadows, not changing further, even if left an hour or more in the bath. As soon as they reach a uniform color they may be thrown into a fixing bath, one ounce hypo to ten ounces water—or they may be put in clear water until all are toned and then

## CAMERA CRAFT

fixed. Fix twenty minutes in a bath of one ounce hypo to ten ounces of water, being careful not to let them mat together too closely for the hypo to get in its work, but I have not found it necessary to keep them moving at all. Lastly, wash an hour in running water or give ten changes of water in about the same time. The prints may be hung up to dry or squeegeed onto ferrotype, glass or ground glass. If the parts are drams, as above, the aggregate two ounces will just tone ten 4x5 prints. The last few will take a little longer in reaching the full tone, and if more are put in, or if the chemicals are not pure, they will have a reddish tone, showing the bath is weak or exhausted. Make up a fresh lot. If you have only, say, four 4x5 or two 5x7 prints to tone, pour out only fifteen minims of sulpho-cyanide, one hundred and twenty minims water, sixty minims gold, etc., and the four drams will be just enough without waste. If, instead of immersing the prints, you can lay them, one at a time, upon a sheet of glass or back of an old negative, and swab them over lengthwise and crosswise with a wad of cotton or a brush, holding the corner of the plate over the graduate so you can use the drainings over and over until the uniform tone is reached. It is a peculiarity of this bath that, no matter how streaky the prints look at first, if you keep brushing them over, they will become entirely uniform in tone. It tones just so far and no further. This bath seems to give the print all the gold it can take, and it takes it and keeps it apparently for all time. One can easily make a little table from the above two examples which will enable him to pour off, each time, just enough and no more to tone the number he has ready. The four original solutions will keep indefinitely, but it is better to keep them in dark bottles or in a box away from the light and well corked. I have kept them for months without deterioration, but after mixing them together the bath must be used within an hour. If called away, throw it out and mix afresh upon returning.

I might remind the beginner that the easiest way to make a ten per cent solution is to first measure ten ounces of water, pour into a clean bottle and paste on a label so that the top edge just marks the height of the ten ounces. Then pour out half the water, put in the ounce of dry chemical; and, after it dissolves, fill up again with water to the ten-ounce mark. The next time it will not be necessary to measure at all. In the borax bottle one can always keep a saturated solution by adding water and borax, enough of the latter to keep undissolved crystals at the bottom, taking care to use pure borax, not that sold for laundry purposes. In buying the soda, ask for plain phosphate of soda, not the tribasic.

I have tried to avoid omitting anything of importance. So many formulas are published that leave something to be guessed at; but, if CAMERA CRAFT's proofreader follows copy, and CAMERA CRAFT's other readers will give this a fair trial, I feel very confident that this formula will become very popular all over the country.

---

Ideals are like stars; you will not succeed in touching them with your hands, but, like the sea-faring man on the desert of waters, you choose them as your guides, and following them, you reach your destiny.—CARL SCHURZ.



---

# A Convenient Method for Some Subjects

By V. A. Ulrich



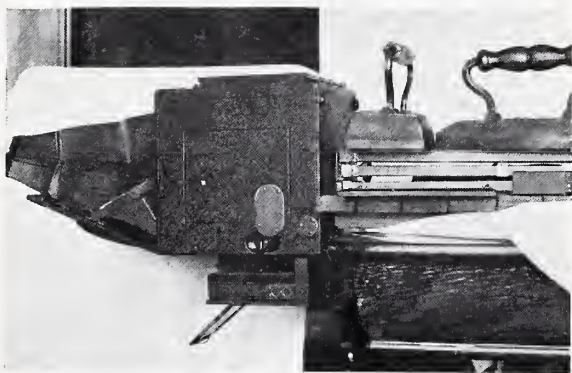
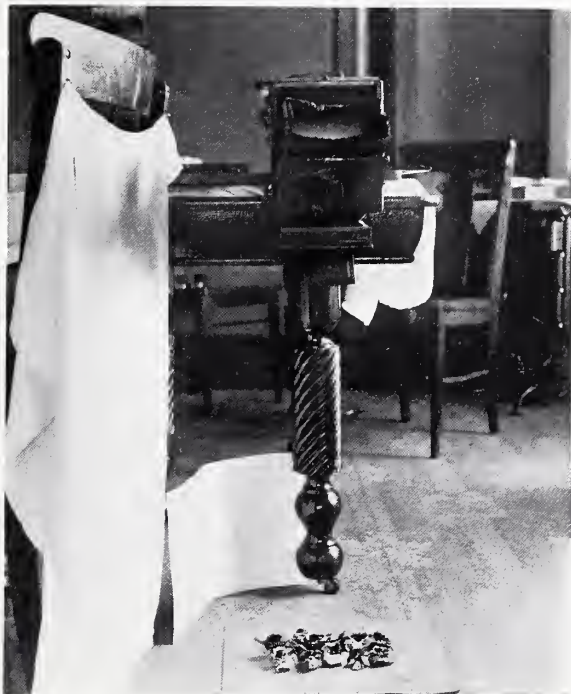
---

Illustrated by the Author

---

With this I am sending three prints. The larger one is an enlargement from a negative made with a Graflex, employed as shown in the two smaller prints. With these prints before one, a description of the method of procedure need take but a few words. The plan is an excellent one for all kinds of copying at home, particularly on account of the even illumination that can be secured on the picture being copied. For delicate flowers that are very apt to droop and show motion during exposure, the method is especially fitted.

In an example like the one shown, the gray cardboard upon which the flowers are loosely arranged can be moved around until the image is properly adjusted on the focusing screen; and, should it be found too far from the lens, it is an easy matter to bring it to the desired distance by placing a small box, some books, or anything at hand and of the desired height, beneath. A possible improvement would be to arrange the flowers on a sheet of glass with the cardboard background a short distance below. This would result in the shadows giving



UPPER: CAMERA AND SUBJECT IN POSITION  
LOWER: METHOD OF SUPPORTING CAMERA

## CAMERA CRAFT



PANSIES: PHOTOGRAPHED LYING FLAT AS DESCRIBED

the appearance of the flowers standing some distance in front of the background, not a bad effect when the flowers are arranged in a more compact form. Reflections from the surface of the glass would have to be avoided, should they make their appearance, by slightly shifting the position of the glass or the angle of the light.

Any library or dining-room table, heavy enough to be free from vibration, can be used to support the camera in the manner shown. The camera need not be a Graflex; it can be any camera the worker happens to have. Even a short bellows camera can be used if a supplementary copying lens or a portrait attachment be employed. If it is desired to use a ray filter, no special holder is required. It is only necessary to lay it flat on the back of the lens inside the front-board. Cardboard, in different shades, furnishes a wide variety of backgrounds, but cloth or other material that would ordinarily require a support or some means of stretching free from wrinkles can be used flat on the floor.

The picture of the pansies herewith is an enlargement from a trial exposure made to determine the exposure to be given an autochrome plate. The subject was on the floor in a good west light from two unscreened windows; time, 2 p. m. With a Cooke lens stopped down to f-16, an Isochrome eight times filter interposed behind it, sixty seconds was given on a Standard Orthonon plate. This exposure was equal to six and one-fourth seconds without the filter. One hundred times that would be six hundred and twenty-five seconds, or a little than ten and one-half minutes. An autochrome plate was then exposed on the same subject, giving it ten and one-half minutes.

## AN INEXPENSIVE BINDING

This method of working lends itself admirably to the making of color plates, the autochrome filter requiring no special support, as has been explained; while the solidity of the camera and the almost entire removal of liability of movement of the flowers during the long exposure gives a decided advantage. The importance of correct exposure and the cost of color plates make the exposing and developing of an ordinary plate advantageous and advisable as a means of establishing a guide to the correct exposure. It will be found that an autochrome requires about one hundred times the exposure necessary with an ordinary rapid dry plate of the speed of Seed 27. The exquisite beauty of a correctly exposed and finished color plate makes it well worth while to make the preliminary trial advised.

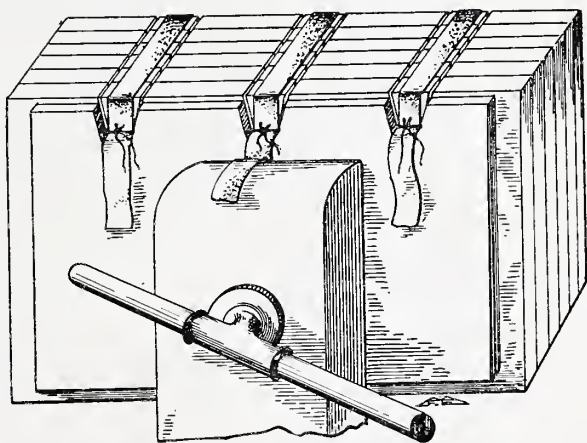
---

# An Inexpensive Method of Binding

By A. C. Bevis



As each number is received and read, it is filed away until the twelve issues for the year are at hand. Then, when I have time, I remove the covers and the advertising pages, withdrawing the wire staples with a pair of pliers. Occasionally there is an extra sheet of two pages only that is loose, that is, does not form a fold at the back as does a four-page sheet, when the advertisements are removed. These are best given a narrow edging of paste to hold them securely to the bunch of pages, called a "signature," which they follow. A little dry glue will be found adhering to the back of each such signature. This is easily rubbed off with the fingers or with a dull knife or scraper, and its removal prevents the back being rough and too thick. This done, and the title index pages removed from the center of the last signature of the December issue and placed in front, all the signatures are placed in proper rotation and "joggled" up to get a straight back. They are next placed between two thin boards and clamped together, an edge of each board coming flush with the backs as shown in the illustration herewith.

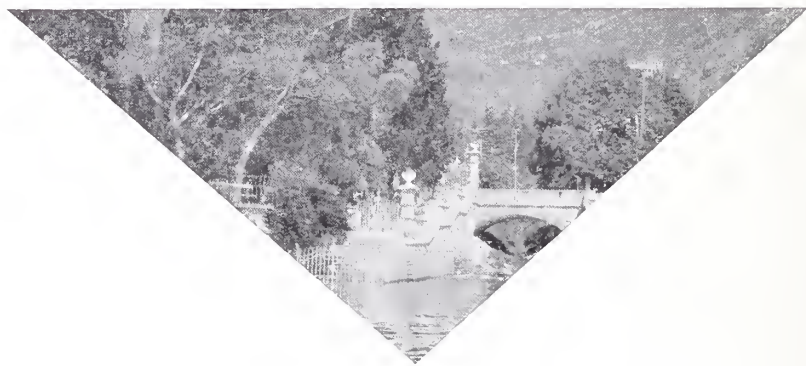


The next operation is to make six saw cuts in the back, two near each end and two at the center, each two about an inch apart and each cut slightly slanting and about three-quarters of an inch deep. These wedge shaped pieces



are broken from the two boards to allow the strings to tie only the magazines when it comes to tying the strips of canvas in place. These strips are cut from strong canvas and cut about the width of the bottom of the pair of saw cuts in the backs. They are laid across the backs as shown, and then, with strong, light, waxed linen thread pulled down into the saw cuts, each of the three strips is tied in place at the same time that the backs are tied together. In other words, a thread passed through one saw cut and drawn down to the bottom of the cut, coming around the end of the canvas strip on that side and back through the other saw cut that inclines towards it. This leaves the two ends on one side of the bunch of signatures where it is securely tied on the outside of the strip of canvas on that side, as shown on the nearer side in the illustration.

This done, the actual covers are a matter of one's individual taste and skill. One can, by examining any ordinary book, see just how easy the final part of the work becomes, once the leaves are secured in a solid, strong back with three strips of strong canvas on each side by which to attach the book to its covers. Two pieces of cardboard, some strong linen or canvas, and some good glue are all that is required. By using care and a little patience, one can have, in place of a lot of loose copies of their favorite photographic magazine, a book with a proper index, a book that is a pleasure and a convenience when one wishes to look up some article or bit of information in a back number of the magazine.



## The Royal Exhibition

The fifty-seventh Annual Exhibition of the Royal Photographic Society will be held at the Gallery of the Royal Society of British Artists, Suffolk Street, Pall Mall, London, September second to twenty-first inclusive. As heretofore, there will be two sections, pictorial, and scientific and general. Entry blanks can be obtained by addressing The Honorable Secretary Royal Photographic Society, 35 Russell Square, London, W. C., England.

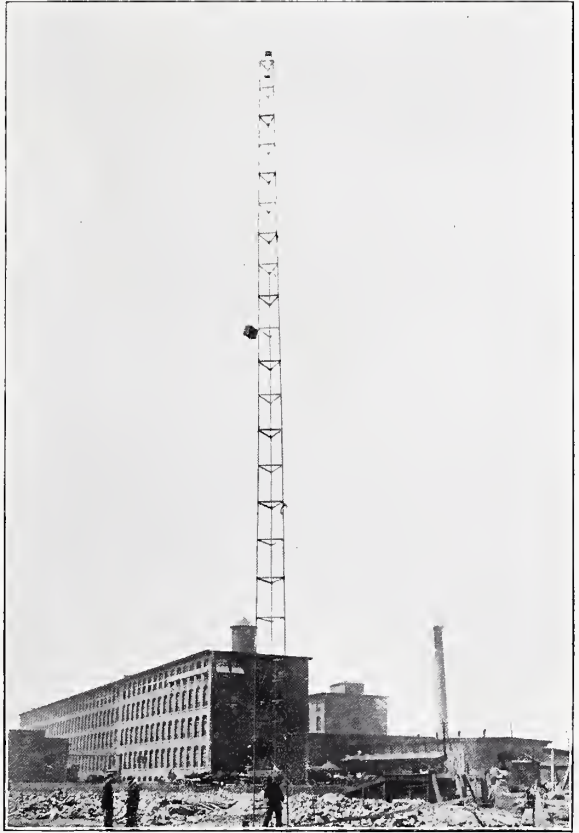
---

# Aerial Photography



Modern methods and high efficiency are shown in many directions of endeavor at the present time, and photography, as applied to the commercial field, is no exception to the rule. This is graphically shown in the accompanying illustration which depicts an entirely new process, one which is destined to achieve notable results in commercial photographic work.

This picture shows the preliminary stage of taking an aerial picture. The gigantic tripod, shown in the foreground, towering far above the building, which is sixty feet high, is the tallest tripod in the world, being one hundred feet in height. This giant tripod, when the proper location is selected, and the angle guides have been set, is raised into place by means of a windlass, and the camera is then conveyed to the guides at the extreme top of the tripod. The shutter is connected with an electric battery, and by this means the operator makes the exposure from the ground.



This aerial, or to use the more common expression, bird's-eye photograph, which the picture shows as about to be taken, includes the entire plant of the Locomobile Company of America, at Bridgeport, Connecticut, a result not obtainable by any other process. The company whose process this is, Humphries & Rock, Bridgeport, Connecticut, have been most successful in the work they have done since evolving this up-to-date idea in photography.

---

We do not need higher education so much as we need a compelling force that will make us put into better practice the education we already have.—A. A. STEWART.

## STEREOSCOPIC DEPARTMENT

### Some Stereoscopic Hints

By James B. Warner

---

*The following article is made up of advice offered by various members of the Stereoscopic Division of the International Photographic Association through the medium of the letter sheets accompanying the circulating sets, and have been gathered together by Mr. Wagner. There seems to be some difference of opinion as to the correct amount of separation that should exist between like points on the two elements that make up the stereoscopic slide. Aside from this variation, the advice given is all of the best, and well worth careful consideration. Should this meet the eye of some stereoscopic worker who can give convincing reasons for a particular amount of separation in the pictures, and he will set them forth in an article of not too great length, we will be pleased to give them publicity in these pages.—THE EDITOR.*

---

A. says: It would be well to bear in mind these facts:

That the distance between like points or "centers" in the two main objects should not exceed two and three-quarter inches.

That the bases of the two prints should exactly correspond and be in line.

That the vertical boundary lines of the two pictures should not correspond; namely, that one element must contain at least one-quarter inch more of the subject on one side, and one-quarter inch less on the other, than its companion. Stereograms that exceed these dimensions will surely cause intense eye strain, and a large majority of people will be totally unable to view them with ease through the 'scope. These rules are followed generally by all stereo workers who make stereograms for the love of the art, and desire to produce perfect work.

B. says: It seems to me that most of us are working in the dark when it comes to cutting our stereo negatives or trimming our prints. Not many eyes can comfortably view a slide that is cut as close as two and three-quarter inches between centers. I think we should adopt a certain width as do the professional stereo makers, and all conform to it. This would give us all greater satisfaction in examining each other's work and would also add to the value of our individual collections of negatives. None of the professionals cut with less than three inches or more than three and one-fourth. Professional die cut paper is made from six to six and one-fourth inches wide for this reason.

C. says: Let me lay down a hard and fast rule in stereo operating. No matter what focal length of lens be used or of what angle it may be; no matter what distance the lenses may be from the object photographed, the same object in each element must occupy the same point in the negative with relation to the center of the element. This can only be accomplished with and by the use

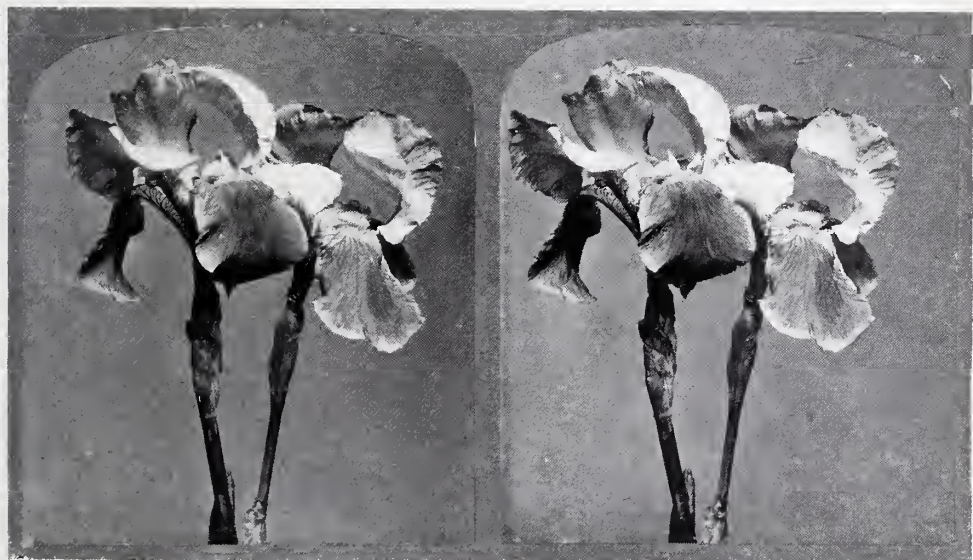


## SOME STEREOSCOPIC HINTS

of an adjustable front, one giving the operator the power to vary the amount of separation of his lenses. Let the operator draw out the outline of the two elements on the focusing screen and then draw a perpendicular line through the center of each. If then the operator will bring an object in the foreground of his picture to that position that brings the same point directly on this line in both elements, the resultant prints will 'scope perfectly. And they will 'scope at exactly the same point on the slide of the instrument no matter what the focal length or separation of lenses employed. I think that a number of workers are ignorant of this simple principle of stereoscopy; and, until they get it well grounded in their minds, and practice it in their work, we will continue to have "eye twisters" offered for inspection. Trimming a print will not make it 'scope perfectly if the two elements of the negative are not correctly made.

Few of the regular stock stereo cameras are equipped with adjustable separation, and for that reason many operators will read the above and find it hardly intelligible until they equip themselves, or rather, their cameras, with an adjustable separation for their lenses. The above rule or principle is not used by the greatest large commercial stereo makers; why, I do not know or care. I do know that proofs submitted to the big houses by myself have been admired and wondered at for their perfect 'scoping qualities.

D. says: If the two prints are joined, that is, printed at the same time on one sheet of paper, select some small, well defined object in the foreground and lay a straight-edge across the two so that the object will be equally cut in each print, and make the first long cut with the trimming knife. Take the right-hand print,—and here we face the important question of width. In the common form of stereoscope we cannot blend the two pictures into one illusion of solidity if they are mounted with a distance of more than three inches between the same objects in the two pictures. In fact, very few people can examine



IRIS

## CAMERA CRAFT

prints mounted three inches apart, except by straining the eyes, and two and a half inches is a better separation. Thousands of stereograms have been put on the market which have been useless except to discourage people in the practice of stereoscopy. Select the part of the print that is desired for the picture, lay the cutting shape or mask over it and cut it out. Here we come to a "dodge." It might be supposed that the sides of the two pictures would be trimmed exactly alike, as was done with the base. But instead of this the left-hand print should have less of its left-hand margin, and more of its right-hand margin, than its companion print has. We term the special trimming of the sides of the left-hand picture a "dodge," for its object is merely to assist the illusion of different planes of depth, by making the mount appear as a frame through which the picture is seen. To understand this, stand at a window and look at the house across the street, or some other object. If you close the right eye and look with the left, you will see more of the right-hand of the view and less of the left, than if you look with the right eye. By trimming the prints in accordance with this rule, we appear to gaze on a vista through an opening. If the prints were trimmed in the opposite manner, the mount would recede from the picture, the view would appear as though mounted on a solid block, and the incongruity of seeing what should be an illusion of distance nearer than its mount would strongly tend to destroy any sense of correctness.

E. says: Don't snap your shutter at the first thing you see because it has stereoscopic relief. You are wasting your time, plates, paper and money. Strive for the artistic; sometimes a simple change of the point of view will make the difference between a picture and a record.

Don't use developing paper because it is easier. Use the paper that will give the most faithful representation of the picture as it appeared in the original.

Don't attempt to take a view which requires a quick shutter, unless your lens is suitable. Stereograms must be in sharp definition, and it takes a good lens to get a good negative of an object in the near foreground, in motion, while preserving the definition in the background.

Don't trim your prints with a different plane at the base of each element. They must be trimmed at the same level.

Don't mount your prints more than three inches apart on centers.

Don't fail to trim a trifle more off the right side of the right-hand element than from the left side of the left-hand element, as it gives the "window" effect.

Don't get in a rut. Take the advice of the critics and try for the best.

Don't pose your figures for a stereo. You would not do it for any other photograph.

Don't fail to apply the rules of composition to your stereos. Then you will get good ones.

Don't cut your figures in twain at the edge of a print. Get them in or leave them out.

Don't have trees or grass sticking up in the foreground, coming in at the sides, or overhanging unsupported from the top of a print.

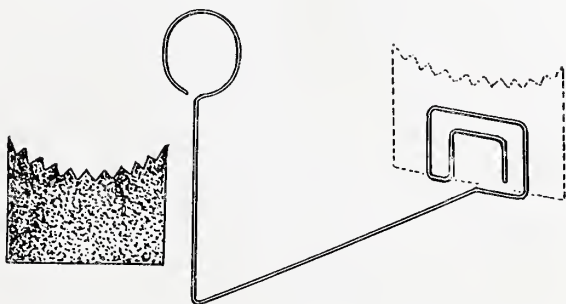
Don't imagine I am going to keep this up; I am not.

## PARAGRAPHS PHOTOGRAPHIC

Kindly Contributed by Our Readers

*Our readers must remember that this department depends upon their own efforts. If all hold back and wait for others to furnish the little hints that make it so valuable and interesting, there will be no continuation, there being no material. Send in your contribution; the editor will see that it reads all right; and, as he gets around to it, he will send you a print or something in return for your kindness. Perhaps that last will induce you to do your share.—*  
THE EDITOR.

**A PRACTICAL VIGNETTER:** Take a piece of heavy wire, one that is fairly stiff, and with a pair of pliers, bend it as shown in the illustration. It goes around the lens, then downward about six inches, next out in front of the lens about eight inches, and finally as shown, to form a clip for holding a sheet of cardboard about seven inches wide. This cardboard should be of a dark color, with one edge cut semi-circular and notched, as shown. The size of the wire and the other measurements will depend, of course, upon the size and focal length of the lens. If a heavy vignetting card is required, it may be necessary to use the portion that encircles the lens double in length, bending it back upon itself to get a firmer hold. This makes a cheap and efficient vignetter that any one can produce by the expenditure of a few minutes' time.—C. B. S., Illinois.



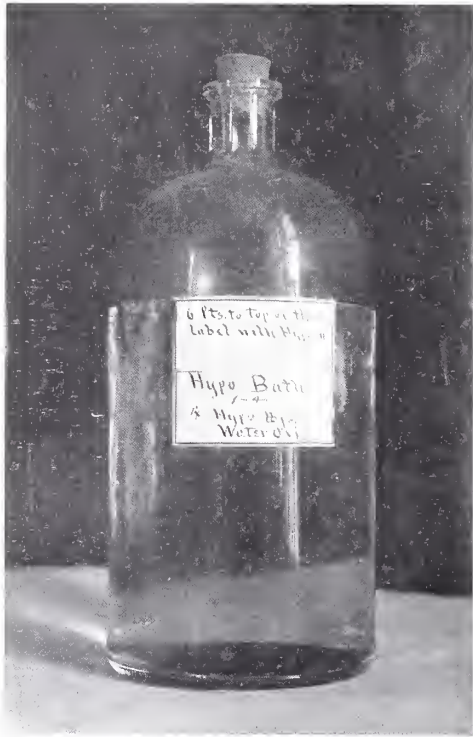
**HOW I MADE A LENS CAP:** An inveterate chewing-gum fiend, I usually possess a supply of empty Colgan's Violet Chip boxes, and having lost the lens cap for my Wollensack lens, used in a 4x5 Korona camera, I improvised one from one of these boxes in the following manner: First I cut a circular piece of black velvet to fit the bottom of the box. The aforesaid boxes, by the way, are enameled tin, one and one-fourth inches in diameter and five-eighths inch in depth. I then cut two strips of strawboard, the kind that comes in packages of print paper, the same width as the depth of the box, and of the proper length to exactly fit inside the rim; this in order to build it up, the inside circumference of the box being considerably greater than the outside measurement of the lens hood. Dampening the strips of strawboard to facilitate fitting them accurately, I fastened them, with Le Page's glue, firmly to the inside of the box and to each other. A strip of the velvet was then cut to fit inside the strawboard rim and glued fast, nap side out. When thoroughly dry, projecting edges were



## CAMERA CRAFT

trimmed smoothly, and the top edge of the strawboard strips blackened with liquid shoe polish. The finished result made a neat-fitting lens cap and has served the purpose as well as a more expensive one from the shop would have done. To be sure, these gum boxes may not fit all lens barrels, but in such case the same idea can be worked out satisfactorily with a box or tube of another sort.—H. C. Ferris, Colorado, I. P. A. 897.

**SELF-MEASURING BOTTLES:** Hypo or other solutions are easily made up without the use of a graduate, once the bottles are properly prepared. Procure from your druggist as many large sized dispensing labels, gummed, as you



may need, and write out on each the name of a solution. The formula can also be placed thereon if you desire, as it will often be found convenient and a time saving. Suppose one is about to make up a solution, say, of hypo: Introduce the required amount of the chemical into the bottle and then measure in the proper quantity of water. Write on your label: "Six pints of water to top of this label when hypo is in." Place the bottle containing the solution on a level table and affix this label, so that the top coincides with the level of the solution inside. This will obviate the measuring out of the water in the future. One has but to put in the desired chemicals and then fill up to top of label with water. To prevent staining of labels on any bottle, always pour contents from the side of the neck opposite to that side of the bottle which carries the label.—E. Stanley Thomas, Ohio.

**AN ADJUSTABLE MASK:** Take a piece of the black paper that comes around plates and cut a piece 7x10. Fold one end over on the other and glue together with a narrow strip of glue along the extreme ends. In this double sheet of black paper cut an opening,  $3 \times 5\frac{1}{4}$ , or any size desired, the size given being right for post cards, the mask to be used in a  $5 \times 7$  printing frame. Next cut a piece of black paper, a quite stiff kind being best, five inches long and about an inch wide. Place this in the fold of the mask and, by sliding it backward or forward, one can govern the length of the cut out opening so as to accommodate  $4 \times 5$  negatives or cut off some part of the image from one end of the regular  $3\frac{1}{4} \times 5\frac{1}{2}$  film. A like strip, only longer, can be used to cut off from the top or bottom; and if one will use a little larger mask and larger

## PARAGRAPHS PHOTOGRAPHIC

printing frame, the sliding part can be cut L shaped so as to cut off both side and end at the same time, while always assuring a square corner.—Wayne Hill, Washington.

**OPPORTUNITIES THAT ARE OVERLOOKED:** The average amateur misses a great deal of the possible pleasure in photography when he places his camera on the shelf for the winter. Photographs made at night or in the evening are delightful and profitable. There are innumerable street scenes, street corners, buildings, porches, and things of that class that are capable of being rendered in an artistic manner. They will at least be unique and a few such in one's collection will add variety and interest. The best time is just after or during a fall of snow. Just break up the snow in the foreground and expose from ten minutes to half an hour, according to the amount of light and the stop, which last need not be a very small one. A backed plate is preferable, but an ordinary one answers very well, as per the example shown herewith. The plate was developed in a tank with pyro-soda, for thirty minutes. A developing paper of rough surface gives better results



A NIGHT PICTURE

than do the glossy and printing-out papers. Try a few such exposures the first snow storm you have.—Louis R. Murray, New York.

**ORTHOCHROMATIC DEVELOPMENT:** For exposures I have found the speed of f-16, Wynne meter, to be about correct, using either the Lumiere or Burk & James six times ray filter. I prefer the latter, as it seems to give better results. A fine developing stock solution is made as follows:

|                                 |            |
|---------------------------------|------------|
| Acetone sulphite .....          | 205 grains |
| Edinol . . . . .                | 150 grains |
| Hydroquinone . . . . .          | 50 grains  |
| Sodium sulphite (des.).....     | 495 grains |
| Potassium bromide .....         | 23 grains  |
| Potassium carbonate (des.)..... | 25 drachms |
| Water to make.....              | 1 pint     |

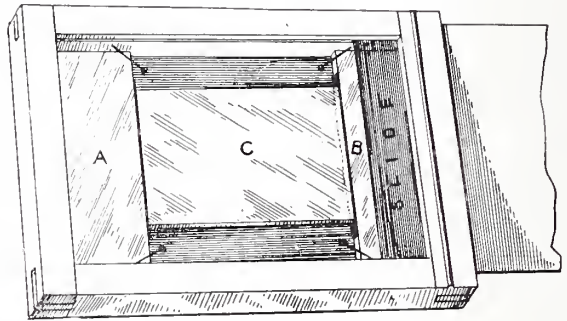
Dissolve in above order. For use, take one part of above stock solution and five

## CAMERA CRAFT

parts of water. Develop two and one-half minutes. If the view contains a predominance of green foliage and that color is desired to be made pronounced in the finished product, use the developer stronger by taking half stock solution and half water. This strength I find very effective in developing the Kodak Velvet Green Paper and Cards. The stock solution is very permanent if not exposed to air and heat. I have found it to retain its strength in cool weather for periods of four or more months.—E. Stanley Thomas, Ohio.

**IMPROVISED KITS:** I use a  $6\frac{1}{2} \times 8\frac{1}{2}$  camera more than any other and frequently want to use a smaller plate therein in order to get the benefit of the larger lens that it is fitted with, a portrait on a small plate instead of in my film camera with its smaller lens. The camera uses holders with a spring at one end like the Premo. To

use the smaller plates, I take an old  $6\frac{1}{2} \times 8\frac{1}{2}$  negative and cut a couple of strips therefrom, six and one-half inches long and of the right width to make up the required length, the difference between the length of the smaller plate and the eight and one-half inches needed to fill the holder. One of



these pieces is put at one end of the holder and one at the other, with the smaller plate in between. The spring at the end of the holder presses down and holds all in place. In practice I put in four common pins, as shown in the sketch, to hold down the inner sides of the strips of old negative, putting in the smaller plate by pressing back the glass strip and spring as with the full-sized plate. It is well to glue a strip of cloth or felt along the edges of the old negative strips where they meet the smaller plate so that the latter will not be inclined to fall out or shift up and down, should the loaded holder have to be carried a little distance.—R. E. Stinson, California.

**AN ECONOMICAL WAY OF DRY MOUNTING:** No doubt all are more or less familiar with the adhesive properties of the white of an egg or albumen, but how many have tried it for mounting pictures? Take an egg and separate the white from the yolk, place in a saucer and beat up a little. Then take your prints and place them face down in a pile, and apply the white of the egg to the backs with the tips of your fingers, or a brush, preferably, as it gets very sticky. Then take your print and place in the exact position you wish it to be on the mount. Place two thicknesses of ordinary blotting paper on top of your print and smooth out with a flat iron just about as hot as you would iron clothes, first being sure that you have no wrinkles in your print. Do not endeavor to iron the prints without blotters over them, or ten chances to one you will spoil them. After this operation you have your prints mounted and "they are there to stay." The beauty of this is that they curl but little after mounting.—Harry A. Miller, Pennsylvania.



---

# CAMERA CRAFT

A PHOTOGRAPHIC MONTHLY

---

Vol. XIX

San Francisco, California, June, 1912

No. 6

---

## A Tendency To Be Avoided

The doctors tell us that a normal appetite is a good guide in the selection of that food which best serves the requirements of healthful living; but, they add, a normal appetite is rare, owing to the fact that most individuals have quite a number of acquired tastes for foods and condiments that they would not otherwise relish; tastes that have been acquired, all unintentionally perhaps, but misleading to the extent that they deviate from the normal. While not so grave a matter in its direct bearing upon the wellbeing of the individual, the danger of acquiring an abnormal taste in the matter of our photographic productions is as great. Like the former, it is unintentionally acquired and as unreliable as a guide.

In the old, wet plate days, and later in the early days of the dry plate, when orthochromatic emulsions were practically unknown, a sky was felt to be rightly represented only by white paper. We have gotten past that point, it is true, but abnormalities are still constantly accepted without question, and accepted most readily by the very ones who should know best through observation that would seemingly be unavoidable in the repeated use of the camera as a means of reproduction. How prone one is to accept shadows represented by inky blackness, devoid of all detail. They are usually so in the photograph that is not made with some regard for the danger, and the photographer gradually learns to accept them that way. But ask this photographer to go out and find a shadow that is as black as it is represented on the print with which he finds no fault. Only the mouth of a deep cave, and that close at hand, will give him a black in nature that approaches the black of his print. If one wants to determine just how few shadows are entirely lacking in detail, he has but to use his eyes. Moonlight shadows may be rather dark when they fall across some dark object, but one who has not previously given the matter attention will be surprised at the amount of detail that can be plainly seen in even moonlight shadows.

Take another instance in which the photograph is inclined to falsify values, the portrayal of distant hills, particularly low, wooded ones on the opposite bank of a lake. These may come out as clear glass in the negative and be reproduced as of inky blackness in the print, without appearing at all wrong to the photographer. And yet had he but observed these same hills at the time the exposure was made, or at any other time, he would have found that they are of an entirely different shade. And this tendency to overlook falsity, if not to

## CAMERA CRAFT

feel entirely satisfied with it, is not confined to the worker afield. Take an ordinary portrait as an example and endeavor to find a face so lighted that portions of the flesh are as white as the white collar below, while other portions are so dark that no texture can be distinguished by the eye. The task will be a difficult one except as one might have a strong search-light that could be employed as an illuminant.

It would be well if the worker who desires to restore his taste to the normal, in the matter of his photographic productions, would give a little study to the real tone values of the objects around him. He will find that a real black is very rare. At a distance of but a few feet a black painted surface loses much of its blackness on account of the intervening atmosphere. He should ask himself if the sky is ever white and answer the question by a few observations. It is true, the sky, being a source of light in itself, excites the eye more strongly than does an expanse of white that can only reflect light from some outside source. There is really some excuse for a white sky, because white is the nearest approach the photographer can make to the intensity of the sky. But it is questionable if the slight gain in intensity is worth the loss of color, as against a white paper and a slightly tinted surface in the photograph.

What has been written above is only suggestive of the value of a little effort to counteract a tendency to accept that which is false. Nothing has been said about the apparent distortion of wide-angle lenses; nothing about the representation of blue as light and yellow as dark; nothing about the representation of objects in motion, and nothing about various other opportunities for variations from the truthful delineation of what the eye sees. Absolutely correct rendition of tone and texture is hardly possible and might not be more than occasionally desirable if obtainable. But the worker should guard his judgment against the tendency to accept too trustingly the productions of his camera. And doing so he will improve the character of his work.

## The London Salon

We have received a package containing prospectus and entry forms for the Third London Salon of Photography to be held in September. These we will be pleased to furnish pictorial workers desirous of submitting pictures and wishing to avoid the delay of sending abroad, although the Secretary, Bertram Park, will be pleased to send copies upon request. The address is given in the following quotation from his letter before us:

"The exhibition held in London last year, as you may know, was a notable success in every way, and the committee have again engaged the fine Galleries of the Royal Society of Painters in Water Colours, 5a, Pall Mall East, where the exhibition will be held from September seventh to October nineteenth.

## A Correction

On page 218 of the last issue, Mr. Blackburn, in advising the use of Rodinal, is made to say: "two ounces of the developer to eight ounces of water." This should read: "two drachms of the developer to eight ounces of water."

# A PHOTOGRAPHIC DIGEST

Edited by H. D'Arcy Power, M. D., Burlingame, California

## A New Method of Color Photography

During the past month the usual periodical screed about a new and wonderful color process has appeared in the lay press, and this time with something of a foundation. We have, in fact, a new and scientifically entirely successful process of reproducing objects in natural color. It is, however, much behind the Lumière method in matter of exposure, and does not admit of transference to paper. These are possibilities of the future, and the opening up of a new line of advance is a matter of congratulation. The following account, from the pages of the *Amateur Photographer*, gives a good epitome of the principles and practice of the new method:

The days of the autochrome boom were recalled by the crowded house of the Royal Photographic Society the other evening, when a demonstration of color photography, which the president described as epoch-making, was given by the brothers Rheinberg. The microspectra method of obtaining color records by prismatic dispersion is not new, in theory, at least, but the credit for working out a practical system must now be given to these gentlemen. Briefly, the method is a purely optical one, and color records are obtained with a single panchromatic plate at a single exposure, and without the intervention of any color screens or colored particles whatever. A plain black and white negative is taken, an ordinary black and white positive is made from it, and by the microspectra method a picture in its natural colors is faithfully reproduced. Like a certain system of furnishing, it is "so simple."

At least four inventors have, metaphorically, strewn their bones on this particular trail, and the well-known interference method of Lippmann accomplishes a great deal in the direction indicated. It seems to have been left for the Rheinbergs, however, to carry into practice what has hitherto been more or less in the realm of theory. Mr. Ernest Rheinberg has been for several years a member of

the Royal Photographic Society, and his brother, Mr. Julius Rheinberg, is well known among microscopists for the developments he has made along that line of investigation, and his name stands high in the world of science as an accomplished mathematician.

It is not to be concluded that because this process has been demonstrated to be practical it will, therefore, be popular in the same sense as the screen-plate methods of color photography are popular. It necessitates a special and costly camera, and not only is this camera essential to the making of the pictures, but also to the viewing of them. Unless, indeed, a rapid bleach-out paper correctly sensitive to the spectrum colors be obtained, the process will have few commercial pretensions, and none are made on its behalf. But, scientifically, its value is very great, and, once having got the outfit, which cannot be other than complicated, it becomes the simplest of all methods of color photography, and, theoretically, the most perfect.

The results the other evening were shown to individual members of the audience by a direct inspection of the positive in the camera, and to the meeting generally by projection on an aluminium powder screen. They evoked the highest commendation, and possessed a peculiar silk-like sheen of lustre which might have been thought to have been due to the metallic nature of the screen in question had the effect not persisted when the pictures were viewed in camera. What, then, is the underlying principle of the microspectra method of color photography? It is a method which is based upon the production by optical means of a surface composed of hundreds of complete but very narrow spectra lying next to one another. The spectra are so close together that to the unaided eye, at the distance of normal vision, the individual colors are indistinguishable, so that the surface appears white. Such a surface is produced by allowing white light to fall upon a line screen, having opaque lines which are broader than the clear interspaces, and form-



## CAMERA CRAFT

ing an image of this screen by means of a lens having a prism in front of it. Each of the clear interspaces is thus spread out into a complete spectrum, the width of which is dependent on the dispersion of the prism.

This surface, being composed of a regular repeating series of all the spectrum colors, can be made to appear in any hue when viewed through a mask which will block out or weaken colors not wanted, and allow the colors composing that particular hue to pass through in their correct intensity. The photographic positive serves as the mask for this purpose. It is nothing more than an ordinary black and white lantern slide of the color object photographed, and this, when laid upon the apparently white surface, which in reality, corresponds to the spectrum surface, cuts off the unwanted colors, and allows to pass in due proportion the colors which are required.

The photograph of any colored object is taken by projecting its image on to the line screen with an ordinary objective lens. The line screen, with the coincident images, is focussed on to the photographic plate by a second objective, with the analysing prism in front of it. The plate has to be equally sensitive to all the spectrum colors, so that the negative will be completely darkened when acted upon by any color in its full intensity, and partially darkened where the incident color is weakened. A lantern-slide positive from this negative will, of course, show the reverse effect of complete or partial transparency, instead of darkening, and, therefore, acting as the desired mask, it appears in the actual colors of the object photographed when it is superposed upon the surface consisting of contiguous whitelight spectra. This effect is obtained by passing white light into the camera, and placing the positive in the exact position previously occupied by the negative.

It would carry us far afield to describe the construction of the micro-spectra camera. The two objectives are seventy-five mm. Zeiss micro-planars, f-4.5. The grating, each space of which is spread into a spectrum when viewing the positive transparency, has three hundred and seventy-two lines per inch, and the prism is one having a "rational" or normal spectrum. The Ilford panchromatic plate is employed, and in order to damp its sensitiveness for certain colors, a compensating filter consisting of a weak

solution of chrysoïdin is introduced. The plates for the positives need only be of fine grain, and give as much gradation as possible, and a good black one. The basis of exposure is from twenty-five to thirty seconds in sunlight in summer for open-air subjects. Negatives with plenty of detail yield the best results. Development is carried out with redinal.

In viewing the results, the grating is illuminated with white light, usually from an arc lamp, so that the spectra are projected on to the positive, and are, in fact, seen through the positive. Or the pictures are projected by arc light on a screen, and although they consist of lines in the actual color of the objects separated by wider dark lines, yet, viewed at the proper distance, the lines fuse, and are not separately distinguishable.

Moderate telephotography is said to be possible with this arrangement, and it can also be used, in conjunction with a microscope attachment, for photomicrography, chiefly for subjects such as polarised light effects, in which color differentiation is a main feature. Further developments seem to depend largely upon an increase of speed in panchromatic plates, and on an increased sensitiveness in such plates to red, providing this can be secured without loss of speed, and without any impairment of their present color sensitiveness to the remainder of the spectrum.

### Blocking Out Skies

The customary way of blocking out a sky is to go round the outline of the landscape with a brush and opaque color and fill up the remaining portion with the same. Too frequently the result of this method is a crude outline that bears most evident traces of a trespassing brush. To take a brush and opaque color along a distant horizon is to destroy at once all sense of aerial perspective. Whenever it is possible to do so the sky should be blocked out on the reverse side of the negative, and if a distant horizon is being dealt with the medium should be graduated towards it so that no decisive line of separation may be apparent. The following method enables this to be done very quickly, and is a method of blocking out skies that I prefer to any other, as there is no evidence of it in the finished print.

Prepare a mixture of quick drying gold

## A PHOTOGRAPHIC DIGEST

size and turpentine, roughly, two parts of gold size to one of turpentine, but the amount of the latter requires adjusting to the quality of the gold size. The mixture should flow like thin collodion. If necessary, filter, or decant after standing several days. Thoroughly clean the reverse side of the negative and flow the vehicle over the sky portion, taking every care to overlap the junction of sky and landscape. With practice it is astonishing how closely the outline of the landscape can be followed with the vehicle, but if it encroaches quite considerably on the landscape side the only inconvenience is a little extra work later on.

As the negatives are coated they are placed in racks to drain, not too close together, and if the gold size is good, and the proportions of it and turpentine suitable, in a couple of hours or so the vehicle will have become quite tacky; when touched with the tip of the finger it should just take an impression without coming off on the finger. On the degree of the tackiness the success of the operation depends, and only experience can decide this point.

Take the negative in the left hand, with the sky portion towards the body of the operator, and well illuminated by transmitted light, either from a mirror or sheet of white cardboard set at an angle. With the right hand take a fair-sized tuft of cotton wool dipped in fine electrotypers' plumbago and draw it gently across the sky at the zenith. The plumbago will adhere to the vehicle and give perfect opacity. Keep the cotton wool well charged with the plumbago and gradually vignette upwards towards the horizon, until on reaching it the sky has been blocked out except just at the juncture, where one has been vignettied imperceptibly into the other.

With many subjects, where trees and buildings project into the sky it is neither possible nor necessary to work so circumspectly, but the leading may be carried right up to and just over the obtruding objects and afterwards removed in a manner to be explained. All the negatives having been treated they are now carefully baked before a slow fire for several hours to drive off the turpentine and harden the gold size. When the baking has effected its purpose a hard film of plumbago remains that will stand years of fair usage.

Those negatives in which the outline remains untouched need nothing further done to them, but where the lead has encroached on the landscape this needs removing.

The above method is part of an excellent article by G. T. Harris, in the *British Journal of Photography* on improving the negative for commercial work, but it is equally applicable to pictorial photography of any kind.

### Line Drawings From Prints on Bromide or Printing-Out Paper

We are frequently asked for the method of making line drawings in pen and ink from photographic prints that we again publish the details for the benefit of many readers. The following solutions will bleach out the photographic image after the subject has been outlined in waterproof Indian ink:

|                      |            |
|----------------------|------------|
| Thio-carbamide ..... | 120 grains |
| Nitric acid .....    | 2 drams    |
| Water .....          | 10 ounces  |

Another formula, which also serves as a powerful reducer for negatives, is iodine solution:

|                                   |         |
|-----------------------------------|---------|
| Saturated sol. iodine in alcohol. | 2 drams |
| Saturated sol. potass. cyanide in |         |
| water .....                       | 3 drams |

This will remove the image instantly. The action can be rendered slower by adding water. This solution is very poisonous.

A reliable waterproof ink, specially suitable for the process, can be made as follows:

|                 |           |
|-----------------|-----------|
| Hot water ..... | 20 ounces |
| Borax .....     | 1 ounce   |
| Shellac .....   | 5 ounces  |

Dissolve the borax first, and then add the shellac, boiling the mixture until the shellac is all dissolved. Then cool and pass it through filtering paper. This solution is then used as a solvent for rubbing up ordinary Indian ink. The photographic image can be readily removed by damping the print and laying it upon the bottom of a clean porcelain tray or a sheet of glass, and pouring over its surface a sufficiency of either of the above reducing solutions.—*Amateur Photography*.

### Copying Paintings In Galleries

Perhaps the chief trouble of picture-gallery work, writes A. J. Bull, in the *March Photo-Engravers' Monthly*, is the reflecting of the gilt frames on the opposite wall and other light objects by the protecting glass. In some of our principal galleries the glasses are held in by small bolts and can be removed if permission be obtained. When this is not pos-

sible, then much may be done by covering up windows and light objects with black cloths, but an effective way of avoiding reflections is to have a large black cloth that can be placed immediately in front of the camera. This should be sufficiently large to prevent any reflections showing in the glass from the position of the lens. A portable frame for this purpose may be made from a bamboo lantern screen, or it may often be extemporized, as, for instance, by standing a tall step-ladder over the camera, lashing a pole across the top, and hanging a black cloth from this. A slit should be cut in the cloth and loosely laced together with black cord so that the lens can look through a small opening. The arrangement usually increases the exposure, as it cuts off some of the light. When the picture is high up, the difficulty is greatly increased by the necessity of building a scaffolding up to the requisite height. For work of this class the lens should be in a black mount, not in bright brass, because this is apt to show even when it is surrounded by a black cloth. The high polish and lacquered brass fittings so often seen on well-made cameras are certainly of no practical advantage to the photographer, and it is now possible to procure high-class lenses and cameras with a dull black finish.—*British Journal of Photography*.

### **Brown Tones by Development on Gaslight Papers**

Dr. E. W. Büchner, in a note in *Photographische Rundschau*, refers to the property of pyrocatechin developer, used without sulphite, to give a warm brown tone on gaslight papers. The result is similar to that on colodio-chloride papers toned with platinum. The pyrocatechin developer consists of a ten per cent solution in water, to which is then added ten per cent soda carbonate solution. Potass carbonate should not be used, as the tone with it is more like the ordinary black color obtained with metol-hydroquinone developer. A longer exposure should be given. The one drawback to this method is that with some gaslight papers the developer without sulphite colors the paper support a brownish tint. An acid fixing bath is not sufficient to discharge this. It is necessary, after thorough washing from hypo, to pass prints into a very weak permanganate bath and then direct into a weak solution of bisulphite. As this slightly

reduces the prints they should be developed to a little over full strength in the first instance.

### **White of Egg for Mounting by Hot Pressure**

The use of albumen (ordinary white of egg) for the efficient mounting of prints is recommended in the *Photo Revue* by M. D. Bernard, who directs its use as follows: The back of the print is gone over with the finger (better than a brush) dipped in white of egg, and then laid at once on the mount. To fix it firmly it is then hot-pressed at a temperature of from one hundred and ninety to two hundred and twelve degrees Fahrenheit—that is to say, as hot as the print will stand. This immediately coagulates the albumen, which thus firmly fixes the print to the mount. Damp the albumen, which thus firmly fixes the print to the mount. Damp has no effect upon this adhesive.—*British Journal of Photography*.

### **Shorter Exposure Time For Autochromes**

M. L. Benoist published some time ago an observation to the effect that if the protecting card placed next the autochrome plate be white instead of the usual black, the exposure time would be shortened. Recently he has experimentally investigated the whole subject and given the results in a paper to the Societe Francaise de Photographie. He first demonstrated that the presence of a reflecting surface behind the film did not lead to loss of truth in drawing or color. Of the various surfaces tested, metallic papers, matt and glossy white paper, he gave the preference to the latter and found that with a piece of this interposed between the plate and protecting card, the exposure can be reduced one-third. This is a valuable saving, especially in indoor portraiture, where a reduction of thirty seconds to twenty is of no small importance. I find no mention of mirror glass: it might be worth trying.

### **Discolored Platinum Prints**

Platinum prints and engravings that have become discolored or yellowed by age may be brightened and restored by soaking in a weak solution of hypochloride of lime. This in answer to a correspondent who has a number of old engravings that he is trying to copy, but finds yellow spots, just visible to the eye, come out quite dark in his copies.



# THE AMATEUR AND HIS TROUBLES

Conducted by Fayette J. Clute

## The Picture Space

A subject that does not get the attention that it requires is used as a title for this paragraph. The picture space is the space enclosed within the four lines that form the edges of the print, or the space enclosed by the one line forming the ellipse or circle sometimes used as a trimming form. To judge from the advice so persistently given the beginner, the right way to get a good composition is to take a picture of everything before the camera and then trim, trim, trim. Of course, it is not eminently practical for one to say that the four sides of his focusing screen or finder enclose his picture space, and then insist upon making every composition fill this space and fill it completely without crowding. It might be done with a fair degree of success if one were willing to pass any picture that did not comply with the requirements, but a better plan would be to admit the possibility of trimming from top or bottom or from one side or the other where the subject seemed to require a little different form.

But the proper distribution of the subject matter being photographed within the confines of the edges of the focusing screen is not so hard a problem as one may think. Neither does it require any great amount of artistic ability. It is, in the main, simply a matter of good common sense, a matter of being logical, consistent, reasonable. A picture is nothing more than some scene or subject pleasing to the eye that is cut off from surrounding objects by the frame or other device. It is, in fact, practically a scene or subject viewed through a small opening or window. Let us suppose one is looking through a small window into a room. The tendency is to come close to the window in order to see a larger part of the room, and this makes the view a wide angle one. If the window be the same size as the plate the distance between the eye and the opening is the focal length of the lens that would reproduce that part of the

room seen through the opening, and reproduce it on a plate of the same size as the opening. If one is asked to observe a distant mountain through a window, and the mountain alone is satisfying and complete, there is no tendency to come close to the window as long as the entire mountain can be seen from the position first taken. This explains the better adaption of a long focus lens to such views. And this comparison of a window to the picture space will help in a lot of other cases. In looking out of a window at a ship or other object moving across the field of view, the tendency is to so change the position of the head that a good part of the unoccupied space is kept in front of the object, until one has lost interest therein, when it, the moving object, is allowed to find its way out of the view on that side. Consequently, it is well to do the same in locating any moving object in the picture space by always having more room in front than behind. This also explains why a violation of the rule gives an unsatisfactory impression of the moving object.

Take a picture that looks too crowded, a horse, for example, with the figure nearly filling the space. If one were looking at this horse through a small window, he would be tempted to move the head nearer to the opening in order that any movement the animal might make would be observable, in order that he might determine what the horse was doing, whether tied or being held. The same holds good in the case of a man bending over. In observing him one would naturally so place the eye in relation to the window that the man could straighten up without raising his head and shoulders out of the view. And a picture of such a man should be arranged in the same way with enough space above to permit of his coming to an upright position. On the other hand, were the man near the window or opening, on the other side of course, and quite close as if engaged in conversation

with the beholder, there would be no desire to see other than his face. The sides of the opening might cut his hat or the back of his head from view, and yet be perfectly satisfactory. This explains why some of the portraits so trimmed are not objectionable. It is simply a matter of being consistent with the situation.

It is evident that in taking a small portion of a view spread out before the camera, some care must be exercised to so select such portion that the one who sees the picture will not be too conscious of the limitations imposed by the four sides of the picture space. If one will study the pictures in an art gallery, or even the work of the illustrators of our popular magazines, he will find that there is never any feeling that the boundaries of the picture space cut off any desired view. Our photographic pictures should do the same. This means getting the necessary features within the picture space and keeping out those features that add nothing to the interest. This is what is done in following the advice to trim, trim, trim. This trimming can all be done on the focusing screen or finder, by moving away or going closer to the view; or, when that is not possible, the substitution of a lens of different focal length as the image is desired larger or smaller. It is merely the work of arranging the view as one would change the position of his head in order to get the most pleasing view through our imaginary window; as one would do almost unconsciously. There is, however, still another feature that calls attention to the boundaries imposed by the sides of our picture space, and does it still more in a photograph than in any other form of pictorial work. I refer to a distinctive line formed by a sharp contrast between some light and some dark portion of the view. In looking at a picture the eye is strongly attracted to the point containing the strongest contrast. If this region of sharp contrast be extended to form a line, the eye shows a marked inclination to follow that line. If this line runs to the edge of the picture and forms an abrupt, or nearly so, angle therewith, the eye is brought to a stop, and the limitation imposed by the edge of the print at once becomes objectional. Such a line is often formed by the

contrast of a river's bank with its waters, and when this line is fairly straight and strong, it should be robbed of its power for harm by having the contrast reduced as it nears the edge of the print. The tone of the water can be lowered by manipulation in printing or work upon the negative; or, in taking the picture, the potency of the line may be destroyed by breaking it up with foreground objects when arranging the view.

### Being Business-Like

There is one professional in this town who turned over a new leaf the first of the year, and it has been a most profitable turning at that. He simply made up his mind that he would give his collections the same care that any other business man gave. Every piece of work that goes out of his place during the day without being paid for is followed by a bill that is made out and mailed the same evening. The first of the month a statement is mailed, and if that does not bring the money a collector is sent after the amount the next collection day. He admits that his fears that a few customers would take offense at his insistence have partially come true, but where he has lost one slow pay customer he has earned the good opinion of several others who were surprised to find a photographer capable of doing business in a business-like manner. It is true that most of these accounts are small ones, and it would not pay to employ a high priced collector. But the office boy makes as good a collector as is necessary for such small amounts, and he really looks more in harmony with the errand than would an older person. It is not a hard matter to keep a small box of index cards from which to make out the statements, and later from which to send out the boy with request for payment. The moment a charge is made, a card is made out, and that evening a bill. All the cards are sent a statement the first of the month, a division card put in, and all new charge cards placed ahead. Cards that hold over to the second month without being paid are gone after a second time, and then either dropped or more urgent demand made, according to the amount involved. The photographer in question is now discounting his stock house bills for the first time in a number of years, and hopes to continue doing so.

## OUR BOOK SHELVES

### **"The Battle of Baseball"**

All photographers are "fans," with a few exceptions, and those few exceptions, even if they do not understand the fine points of the game, have a keen appreciation of good baseball pictures, the kind that show spirited action, and what kind of pictures can show more? And the new book the Century Company has gotten out, a book with the title used at the head of this, is full of reproductions of the finest examples of speed photography that it has ever been our good fortune to see. These pictures, as well as the text, are by our well known photographic expert and writer, C. H. Claudy, a gentleman who needs no introduction to our readers. The text is really the strong part of the book, showing as it does Mr. Claudy's close study of the game, his familiarity with all the fine points of "inside" ball, his knowledge of the strategy employed, and his close association with present day baseball in all its detail. The book is one that will delight any baseball fanatic or photographic crank; doubly so, the individual who happens to be both. Published by The Century Company, New York. Price one dollar and fifty cents net, postage twelve cents extra.

### **"How To Make Good Pictures"**

The above is the title of a new book from the press of the Eastman Kodak Company, Rochester, New York. It will be found at all the dealers throughout the country, and should be in the hands of every camera user in the country. It contains over one hundred and fifty pages, and we should judge, almost as many handsome illustrations. It certainly covers the field of amateur photography, the section devoted to home photography being particularly full, clear, exhaustive and well illustrated both with examples and diagrams. The price is seventy-five cents, and the book is worth as many dollars to the worker who wants to make good pictures. If your dealer does not have it, or if there is no dealer

near at hand, copies can no doubt be obtained direct from the Eastman Kodak Company, Rochester, New York, upon receipt of the price. And none of our readers need have the least doubt about the book being excellent value, or feel any necessity of seeing it before buying.

### **"The First Book of Photography"**

The above is the title of a book just off the press, a handsome little book, well bound and well illustrated. As to the text, it is only necessary for our readers to know that it is from the pen of C. H. Claudy, the well known writer on photography, frequently a contributor to our own pages. In addition to living up to its title, the book provides many hints and suggestions that would be of great value to many amateurs who consider themselves well past the beginner stage. The book is published by McBride, Nast & Company, 311 East Seventeenth Street, New York. The price is seventy-five cents; postage, eight cents.

### **"Flashlight Portraiture"**

The fourth of the "Big Six Series" of practical photographic manuals has the above title. The book is eminently practical and helpful, well illustrated with both diagrams and halftones, the former showing just how the results are achieved and the latter the actual results. Flashlight work is becoming so popular with both amateurs and professionals, particularly in the field of home portraiture, that this book will find a large sale. It can be secured of all dealers, price twenty-five cents, or direct from the publishers, Tennant & Ward, 122 East Twenty-fifth Street, New York.

---

### **Reported By William Wolff**

L. A. Gregory, of Medford, is doing some fine panoramic work in that section.

Charles Boussum, of 26 Kearny Street, has opened a branch on Kay Street, Sacramento.

Inez Fitzgerald, formerly of Gilroy, is now located at Grants Pass.



# INTERNATIONAL PHOTOGRAPHIC ASSOCIATION

## Officers of the I. P. A.

F. B. Hinman, President, Room 4, Union Depot, Denver, Colorado.

J. H. Winchell, Chief Album Director, R. F. D. No. 2, Painesville, Ohio.

Fayette J. Clute, General Secretary, 413-415 Call Building, San Francisco.

Harry Gordon Wilson, Director Stereoscopic Division, 4954 Washington Ave., Chicago, Ill.

NOTE.—All stereoscopic slides sent to Director for the circulating sets must be mounted, titled, and show the maker's name and I. P. A. number on the back of mount. Notify the Director how many mounts can be used, and a supply will be sent you by return mail.

Charles M. Smythe, Director Post Card Division, 1160 Detroit St., Denver, Colo.

NOTE.—I. P. A. members, or applicants for I. P. A. membership, desirous of joining the Post Card Division, should enclose three or more cards of their own make to the Director for approval. If they are of requisite quality a letter "X" will be placed after the member's number indicating membership in the Post Card Division. Always request a new notice in renewing your subscription. When desiring a reply from the Director, kindly enclose stamp. Address Charles M. Smythe, 1160 Detroit St., Denver, Colo.

George E. Moulthroppe, Director Lantern Slide Division, Bristol, Conn.

Edward F. Cowles, Secretary Lantern Slide Division, 11 Oak St., Bristol, Conn.

## MEXICO.

Vice-President—Jose Ramos, 2a de Morelos 44, Morelia, Mich., Mexico.

Album Director—J. Jesus Martinez, Ap. 5, Morelia, Mich., Mexico.

## CANADA.

Album Director—C. H. Foster, Kerwood, Ontario, Canada.

Secretary—J. A. Waddell, Kerwood, Ontario, Canada.

## FOREIGN SECRETARIES.

French—Charles A. Wagny, 247 Torrence St., Punxsutawney, Pa., U. S. A.

German—George N. Baumiller, Nutwood, Ohio.

## ALBUM DIRECTORS.

Alabama—Richard Hines, Jr., 155 State St., Mobile.

Alaska—P. S. Hunt, Valdez.

California—Sigismund Blumann, 3159 Davis St., Fruitvale, Cal.

Colorado—O. E. Aultman, 106 E. Main St., Trinidad.

Connecticut—George E. Moulthroppe, Bristol.

Florida—Capt. E. S. Coutant, U. S. Life-Saving Service, Oak Hill.

Georgia—L. O. Surles, 231 E. Pine St., Atlanta.

Idaho—Eugene Clifford, Weippe.

Illinois—George A. Price, 1102 West Main St., Urbana.

Indiana—H. E. Bishop, 1706 College Ave., Indianapolis.

Iowa—C. E. Moore, Eddyville.

Kansas—H. E. High, Box 72, Ellsworth.

Maryland—E. G. Hooper, 218 East 20th St., Baltimore.

Massachusetts—John Mardon, 161 Summer St., Boston.

Michigan—W. E. Ziegenfuss, M. D., 327 West Hancock Ave., Detroit.

Minnesota—Leonard A. Williams, St. Cloud.

Mississippi—Emory W. Ross, Institute Rural Station, Edwards.

Missouri—Wharton Schooler, R. F. D. No. 2, Eolia.

Nebraska—Miss Lou P. Tillotson, 1305 South 32d St., Omaha.

New Hampshire—Mrs. A. Leonora Kellogg, 338 McGregor St., Manchester.

New York—Louis R. Murray, 17 Hasbrouck St., Ogdensburg.

New Jersey—Burton H. Allbee, 103 Union St., Hackensack.

North Dakota—Jas. A. Van Kleeck, 619 Second Ave. North, Fargo.

Ohio—J. H. Winchell, R. F. D. No. 2, Painesville.

Pennsylvania—L. A. Sneary, 2822 Espy Ave., Pittsburg, Pa.

South Dakota—C. B. Bolles, L. B. 351, Aberdeen.

Texas—Emmett L. Lovett, Stamford.

Utah—John C. Swenson, A. B., Provo.

West Virginia—William E. Monroe, Box 298, Point Pleasant.

## STATE SECRETARIES.

Answers to inquiries concerning membership and membership blanks will be supplied by the State secretaries. Album directors are at present acting as State secretaries in such of their respective States as have as yet no secretaries.

California—W. E. Thomson, 3540 School St., Fruitvale, Oakland.

Idaho—Eugene Clifford, Weippe.

Indiana—R. A. Underwood, 912 E. 15th St., Indianapolis.

Kansas—H. H. Gill, Hays City.

Mississippi—Joe C. Montgomery, R. F. D. No. 1, Box 36, Edwards.

Missouri—J. F. Peters, 6220 Berthold Ave., St. Louis.

New York—Louis R. Murray, Ogdensburg.

Oregon—F. L. Derby, La Fayette.

Wisconsin—F. W. Freitag, 500 Monument Square, Racine.

## NEW MEMBERS

3327—John A. Maul, R. F. D. No. 1, Flevna, Kans.

3¼ x 5½, developing and printing-out papers, of general subjects; for anything interesting. Post cards only. Class 1.

3328—K. G. Nelson, 705 W. Ave. South, La Crosse, Wis.

5x7, 4x5, and stereos, developing paper, of scenery and mountains; for Indian pictures and scenery in 5x7 only. Desire to exchange 5x7, stereos, and unbound lantern slides.

Class 1.

# INTERNATIONAL PHOTOGRAPHIC ASSOCIATION

3329—Geo. R. Bunn, 704 W. First St., Los Angeles, Cal.  
3¼x5½, of Yosemite National Park and other mountain scenery; for similar subjects or any natural scenery. Class 1.

3330—Anthony Buchal, R. F. D. No. 4, Olivia, Minn.  
5x7, various papers, of all-round photography; for the same. Post cards only. Class 1.

3331—M. E. Newell, Brighton, Ill.  
Class 2.

3332—Reed D. Bush, care K. T. & O. Co., Section 25, Coalinga, Cal.  
Class 3.

3333—George A. Wilson, Box 171, Sutherland, Neb.  
Class 2.

3334—Peter E. Nielsen, Sanak, Alaska.  
Class 3.

3335—F. I. Vergere, Enterprise, Ore.  
Post cards, of elks, mountain and general views; for general views. Post cards only. Class 1.

3336—Edgar O. Spaulding, Harrison, Maine.  
5x7, 8x10, mostly 5x7, developing paper, of general landscapes, winter scenes; also a few Southern California views; for anything interesting. Class 1.

3337—Lawrence Kiefer, 900 Hampshire St., Quincy, Ill.  
4x5 and 3¼x5½, developing paper, of portraits, scenery, river views, comics, etc.; for scenery and general views. Class 1.

3338—Armin Gierow, Clinton, Wis.  
3¼x5½, developing paper, of miscellaneous views; for the same. Post cards only. Class 1.

3339—Al Raggio, Martell, Cal.  
3¼x5½, developing paper, of general views; for the same. Class 1.

3340—Miss K. Gerald Bullard, 519 Murphy St., Murphysboro, Ill.  
3¼x5½, of miscellaneous subjects; for the same. Post cards only. Class 1.

3341—Frank A. Rice, Box 1125, Ouray, Colo.  
3¼x5½, developing paper, of landscape and mountain scenery; for general views. Class 1.

3342—Warren W. Willison, 223 Market St., Winona, Minn.  
4x5, and post cards, developing paper, of landscapes, river and miscellaneous views; for miscellaneous views. Class 1.

3343—Albert Nagel, Mayville, Wis.  
Class 2.

3344—Earl Middleton, R. F. D. No. 1, Republic, Wash.  
4x5, developing paper, of mountains and hunting, just a beginner; for the same. Class 1.

3345—Rowe D. Murray, 484 Wabash Ave., Detroit, Mich.  
4x5, 5x7, and 8x10, developing paper, of miscellaneous subjects, landscapes, marines, river views and genre; for the same; also farm scenes. Class 1.

3346—R. G. Johnson, Elva, Neb.  
Class 3.

3347—Walter V. Overman, 1935 N. C St., Elwood, Ind.  
Stereoscopic views, printing-out paper, of general subjects; for the same; particularly desire foreign exchanges. Class 1.

3348—C. J. Brodersen, Gl. Kongevej 121, Copenhagen, Denmark.  
Class 2.

3349—Lawrence O. Surles, 231 East Pine St., Atlanta, Ga.  
3¼x5½, developing paper, of Southern darkies specialties, wooded scenes, sunsets, and studies in flowers; for good scenery, wild outdoor scenes, studies and general views. Post cards and sizes near above. Class 1.

3350—Ira W. Guldner, 21 West 8th St., Hutchinson, Kan.  
3¼x5½, 4¼x6½, and 5x7, developing papers, of views of city and scenery of different places; for buildings and scenery. Class 1.

3351—Geo. Carl Tregea, 121 W. Falconer St., Falconer, N. Y.  
Usually 5x7 and post cards, developing paper, of street scenes and landscapes; for landscapes, old ruins, street scenes, etc. Class 1.

3352—J. J. Hahn, Union St., Dwight, Ill.  
Class 2.

## RENEWALS

1864—A. G. Lindgren, Echo, Minn.  
3¼x4¼, developing paper, of general land and water scenes in S. W. Minnesota; for Yellowstone National Park and western U. S. scenery views. Unmounted prints only. Class 1.

2121X—Minnie Mendenhall, 126 N. Friends Ave., Whittier, Cal.  
Class 3.

2202—H. H. Wiles, Box 58, Cedarhurst, Colo.  
Class 2.

2533X—Gilmer Winston, care Union & Planters' Bank & Trust Co., Memphis, Tenn.  
2½x4¼, 4x5, and a few 5x7. Will exchange prints or post cards for first-class work only; will also exchange sepia or black and white bromide enlargements to 14x17. All work carefully done with good material and anastigmat lenses and will not receive any but first-class work in return. Class 1.

2915—Tom C. Bonney, Faulkton, S. D.  
Class 2.

3096X—David Gibb, care Simmonds Studio, 102 W. Gambler St., Mt. Vernon, Ohio.  
Up to 6½x8½, of views of interest and monuments; for the same. Prints and post cards. Class 1.

3296X—T. J. Hoge, Postal Telegraph Co., Pittsburg, Pa.  
4x5 and smaller, developing paper, of portraits, landscapes, and historical views; for the same. Class 1.

## CHANGES OF ADDRESS

1865X—Chas. W. Davies, Box 528, Lake Charles, La.  
(Was Box 148.)

2100—Mrs. R. E. Pennington, Box 15, R. Q. Bird Park, Pacific Beach, Cal.  
(Was Mabton, Wash.)

2134X—Joseph R. Poole, 144 Congress Ave., Chelsea, Mass.  
(Was 147 Clark Ave.)

2769—C. W. Junktens, Lupton, Mich.  
(Was Lewisburg, Ohio.)

2839—J. H. Chinnery, Florence, Ore.  
(Was Butte Falls, Ore.)

2941—Haskell R. Koons, General Delivery, Canton, Ohio.  
(Was Biloxi, Miss.)

3023—S. H. Wood, Beaver City, Neb.  
(Was Oxford, Neb.)

3112—R. F. Clark, Butte Valley Plant, G. W. P. Co., Keddie, Cal.  
(Was Bishop, Cal.)

3205—Clifford Hampton, West Palm Beach, Fla.  
(Was Western, Neb.)

3224—Floyd F. Smith, Augusta, Mich.  
(Was Ferrysburg, Mich.)

3234—D. M. Ward, Elk City, Kan.  
(Was Brame, Okla.)

3275—Mrs. John Cowie, R. F. D. No. 3, Warsaw, N. Y.  
(Name misspelled in April issue.)

3280—John F. Meissner, 193 Lockwood Ave., Buffalo, N. Y.  
(Was Milwaukee, Wis.)

## WITHDRAWALS

3080—August Ballmann, St. Louis, Mo.  
On account of lack of time.

3114—J. G. Boyd, St. Louis, Mo.  
Traveling at present and cannot exchange.

# CLUB NEWS AND NOTES

Club Secretaries and others will oblige by  
sending us reports for this Department

## M. A. A. A. Camera Club

This club held its sixth annual exhibition at the Club house of the Montreal Amateur Athletic Association, 250 Peel Street, Montreal, April eighth to thirteenth, inclusive. There were one hundred and ninety-six entries hung, which compare favorably with those of previous years. The division of the open classes into, A, Figure Studies; B, Landscapes; C, Waterscapes, and D, Genre, permitted the Jury of Award to recognize meritorious work which could not have otherwise competed on equal terms, an account of the divergence of subjects. The prize offered were silver and bronze plaques for first and second in Classes A and B, and bronze plaques for the others. Those winning in the Open Classes are: A, First, Jos. M. Rogers, Chicago Camera Club; Second, B. F. Langland, Wisconsin Camera Club; B, First, W. R. Allen, M. A. A. A. Camera Club; Second, B. F. Langland, Wisconsin Camera Club; C, Dr. A. R. Benedict, Montclair, New Jersey, and D, W. S. Fife, Toronto Camera Club. Certificates of Honorable Mention were awarded to A. R. Benedict, Charles A. Coles, W. S. Fife, R. S. Kaufman, H. Mackie, E. Ratibor, and H. C. Shepherd. In the Club Class the winners are: First, W. R. Allen, and Second, B. B. Pinkerton.

## An Interesting Brochure

There has reached our desk a handsome little booklet of sixteen pages and cover, gotten out to commemorate the twentieth anniversary of the New Britain Camera Club. It contains a dozen reproductions of pictures by the members, pictures used to brighten up the pages given to an account of the club's doings, this letter written being personal, unstilted lines. The by-laws of the club are also incorporated. All in all, the booklet is most refreshing. The arrangement of the matter is very fine. Running heads and page numbers, entirely unnecessary in such a publication, are left out. Still more gratifying is the entire absence of advertis-

ing, eloquent testimony to the fairmindedness of the club in its relations with the local dealers. It is a publication that other clubs would do well to immitate, as it can have only a strong influence upon others to joint the organization for which it speaks. While the edition is no doubt limited, the Secretary, Ellsworth Sheldon, New Britain, Connecticut, would no doubt be pleased to send a copy to other clubs that might be interested.

## Observes Birthday

In the spring a young man's fancy lightly turns to thoughts of amateur photography, which no doubt accounts for the birth of the Elysian Camera Club, of Hoboken, at this season of the year a decade ago. To be exact, it happened on the twenty-first of April, 1902, and the members of this very live and active organization have celebrated its tenth anniversary in a manner befitting its splendid history.

The celebration lasted for eight days, beginning on Sunday, April twenty-first, and continuing until the following Sunday.

On Sunday and Monday there was an exhibition of prints at the club rooms; Tuesday evening, a smoker and an exhibition of lantern slides. Wednesday night was devoted to the fair sex, a "ladies' night" having been arranged for that evening. Thursday night there were lantern slides and an exhibition of prints, and the remaining days of the celebration were devoted to an exhibition of prints, to which the general public was cordially invited.

## Do Not Overlook This Offer

Attention is called to the offer made in our advertising pages by Jas. H. Smith & Sons Company, to intensify and make a print from one of your under-exposed films, free of charge. All of our readers who are not acquainted with the merits of Victor Intensifier should take advantage of this offer and find out what this excellent intensifier is capable of doing.



## NOTES AND COMMENT

A Department Devoted to the Interests of our Advertisers and Friends  
In it will be found much that is new and of interest

### Will Lussier Passes Away

Will Lussier, well known to the photographers of the Pacific Coast through his long connection with the Cramer Dry Plate Company, as Coast agent, passed away April sixth at San Gabriel. Pasadena Lodge, No. 672, B. P. O. E., was in charge of the funeral services. He leaves a wife and many friends to mourn his loss.

### Francis Brugiere Exhibits

April twenty-second to twenty-seventh there was held at the galleries of a local art dealer one of the finest exhibitions of photographic work ever shown in this city, the productions of the well known artist of the camera, Francis Brugiere. The exhibition was noteworthy in the uniform high merit of the pictures shown, and the entire avoidance of that occasional departure into the extremes of varying treatments that suggests an uncertainty as to ideals and methods. Portraits predominated, and in these Mr. Brugiere shows a master hand.

### A Whole-Souled Advertiser of To-Day

Many a manufacturer of the olden time refused to advertise for fear he might create a demand for his line of goods, and that some of his rivals might, therefore, profit by his outlays. Such narrowness of view and bitterness of competition then existed, that even were such a person convinced that he would reap nine-tenths of the new custom, he would not enter the field because of the one-tenth that would reach his rivals.

Life widens; intelligence enlightens, and advertising, as a force, has developed many things for which it receives no direct credit—stimulating commerce, proclaiming new inventions to the very ends of the earth, unifying fashions and systems, softening prejudices, sifting with lightning speed the pretensions of manufacturers and merchants, making possible such enormous outputs on the part of individual houses as to greatly reduce the cost and the necessary percentage of profits. Advertising has made a

noble showing in the work of the world, and it is destined to be still greater.

It is truly a wise and yet a generous-spirited advertisement which, regardless of the multitudes of other rivals, the Eastman

Those old Daguerreotypes of grandfather and grandmother and Aunt Mary and then the quaint pictures of father and mother taken just after the war—money couldn't buy them from you.

Are you forgetful of the fact that future generations would cherish just such pictures of you?

*There's a photographer in your town.*  
**Eastman Kodak Co. Rochester, N. Y.**

Kodak Company is putting out in all the leading publications in the interest, not of its own business directly, but of each and every photographer in the United States. Read it; study it; think about it, and realize how kindly the whole photographic trade of the United States must view its brave helpfulness.—*Famc.*

### The Euryplan Lens

Mr. Stellmann, the local agent for the Euryplan lens, placed one of the Series Va in our hands for trial. It is a lens of seven inches focus working at an aperture of f-4.5. It is symmetrical, and a singel combination gives an image of double the size of the complete lens, and does it at an aperture of f-8.5, making it easy to do high-speed work with a focal length that gives almost a telephoto picture. The lens tried, intended

for a 5x7 plate, was found to give remarkably good results when used on an 8x10 plate and stopped down for wide-angle effect. The full combination, owing to its large aperture, f-4.5, makes an ideal lens for portraiture, particularly home portraits in a poor light. The single combination used, the back one in our case, also gave portraits of an exceptional high character. All in all, the lens is one of the best anastigmats it has been our pleasure to try, and we would advise all our readers to write or call on Mr. Stellmann if the need of a new lens is felt. Circulars will be sent upon application to L. J. Stellmann, 1017 Vallejo Street, San Francisco, California.

#### **Bissell College of Photo-Engraving**

The College has just received a call for an all-around engraver from the Government of Venezuela, South America. One of the students expects to take the position in a couple of weeks. The consul at New York has guaranteed all traveling expenses for the trip in addition to the salary. This will give the engraving college representatives in six of the Spanish-American countries; Venezuela, Mexico, Cuba, Guatemala, Panama and Ecuador. Incidentally, our representative student in Ecuador, Juan Amat, writes us that he and his political party have been revolutionized, and he will retire from the engraving business in that country until the next revolution.

Chas. E. Scott, engraver of 1910, who recently returned to the College for review work, has taken a position with Carl Thompson, student of 1905, who has an engraving plant at Omaha.

Gustav Hauschild has gone to work for the Gray Printing & Engraving Company, of Fostoria, Ohio. Mr. Gordon Gray was a student in 1905.

#### **Flashlight Cartridges**

The past season shows a greatly increased demand for the Actino Flash Cartridges, the sale having doubled during the past year. They are packed in boxes of six each, the smaller size being suitable for illuminating a twelve-foot room and the largest of the three sizes a thirty-foot one. They are very convenient and the certainty of ignition which characterizes them, together with their strong illuminating power, makes them most desirable for flashlight work. They do away with the trou-

ble and uncertainty of measuring out some given quantity and using a lamp. One simply uses a cartridge of the desired size, placing it where desired, removes the cover, and ignites the safety fuse. One or two exposures made with their assistance will assure a continued use. They can be obtained of most dealers or direct from the manufacturers, James H. Smith & Sons 3541 Cottage Grove Avenue, Chicago, Illinois.

#### **A New Price List**

The Photo Products Company have recently issued a new price list of their complete line of photographic paper and post cards. Price lists as a rule are most uninteresting pieces of literature, but this one is an exception. They not only mention the various grades, but describe them in such a way so that the photographer can easily tell which is likely to best answer his requirements. The list is neatly gotten up, and consists of twelve pages; one of them contains an excellent halftone reproduction of their plant.

#### **Merriam's New International**

"Webster's New International Dictionary," advertised on another page, has been the standard authority of the Government Printing Office for over forty years. A few commendations follow:

"Not a word or a definition in which some change for improvement has not been made."—*New York Sun*.

"The novel division of the page into two sections is a stroke of genius."—*Chicago Record-Herald*.

"It stands preeminently in the very front rank as a necessary and esteemed lamp of our language."—*Portland Oregonian*.

"Stands as the product of ripe scholarship and a model of convenient arrangement."—*Detroit Free Press*.

"The book is a monument to the greatness of our language."—*Indianapolis Star*.

"One of the wealthiest mines of information in the world is the just-out issue of Webster's New International Dictionary."—*Boston Globe*.

#### **Tennant & Ward In New Quarters**

Tennant & Ward, the well known publishers of the *Photo Miniature* and books on photography, have removed from 122 East Twenty-fifth Street to 103 Park Avenue.

## NOTES AND COMMENT

New York. The new editorial and business offices are near the Grand Central Depot, in the very heart of the city, and, therefore, most advantageously located. We have not yet received the usual advice in such cases, that the move was made necessary in order to secure larger quarters for the handling of a greatly increased business, but sincerely hope that our good friends are enjoying the ever-increasing business to which their efforts entitle them.

### **Some More New Styles Coming**

Mr. Herman Adam, vice-president of the California Card Manufacturing Company, is at present in Europe looking up new material and ideas at the mills and elsewhere, to the end that his firm will have out some excellent new styles for the holiday trade, and in good season. These new offerings will be shown by the firm's traveling men in the near future. The firm is sparing no pains or expense to maintain the enviable position which it holds, and its customers may be assured the most advanced style and highest quality. If you have neglected securing one of their catalogues, send for it at once, using your business stationery or enclosing business card. Address, California Card Manufacturing Company, Potrero Avenue and Mariposa Street, San Francisco, California.

### **A Fine New Catalogue**

Ask your dealer for a copy of the new Hawk-Eye catalogue. It is a beauty, and covers a line of cameras that is not only holding its popularity, but constantly adding thereto. The Hawk-Eye folding cameras open at the side instead of at the top, and with the exception of the box cameras and the stereo models, are all made of aluminum, covered with seal grain leather. The line is one that will interest any camera user who desires a good camera making a handsome appearance, and one at a reasonable price. If there is no dealer near, send direct to Blair Camera Division, Eastman Kodak Company, Rochester, New York, for a copy of this new catalogue.

### **Mailable and Less Expensive**

Victor Intensifier, which has been advertised in our pages for some time, should have the attention of all our readers. In addition to being a most excellent and dependable article, but being in powdered form it is mailable and much more economical than

other intensifiers that are sold in liquid form. The powders, costing twenty cents, make four ounces of an intensifier that will work wonders with negatives that lack the requisite amount of density for good prints. Order a package from your dealer and give it a trial. If he does not have it, send direct to the manufacturers, Jas. H. Smith & Sons Company, 725 East Thirty-ninth Street, Chicago, Illinois.

### **Flashlight For Color Work**

At a public demonstration held by the Photographers' Club of Bridgeport, the Agfa flashlight powder proved to be a solution of the greatest drawback in the making of color plates (autochrome). George L. Barrows, of the Berlin Aniline Works demonstrated the making of color plates by the aid of flashlight and the new Agfa professional flashlamp just introduced by this company. The Mayor of Bridgeport and several well known society leaders were all successfully photographed. The Agfa powder overcomes the objectional smoke annoyance as well as the explosive noise, so apparent with some flash powders, and a comparatively small amount of powder is used, owing to the extreme amount of light produced.

### **The New Premo Catalogue**

The Premo line of cameras is too well known to need our praise, but the new Premoette Junior is a novelty. It is a complete little camera taking a twelve film pack,  $2\frac{1}{4} \times 3\frac{1}{4}$ , selling for the small price of five dollars. It has a ball-bearing Kodak shutter and direct view finder, yet folds into less than one and one-half inch in thickness. It is well made, and handsomely finished in keeping with the more pretentious cameras making up the well-known Premo line. The new catalogue describes them all. Get a copy of the new 1912 catalogue off your dealer, or write direct to the Rochester Optical Division, Eastman Kodak Company, Rochester, New York.

### **The 1912 Kodak Catalogue**

The Kodak catalogues are always handsome and interesting, and well worthy of the popular Kodaks that they describe and picture. Folding Pocket Kodaks, Vest Pocket Kodaks, Special Kodaks, Speed Kodaks, Panoramic Kodaks, Bull's Eyes, and Brownies, are all listed in their various



## CAMERA CRAFT

sizes and styles. Be sure and get one of the new, 1912 catalogues of your dealer, or, if there is no dealer near at hand, write directly to the Eastman Kodak Company, Rochester, New York.

### Illinois College of Photography

The photography boys' bowling team has secured a decided lead over the engravers during the past month and are beginning to insinuate that the game is too deep for them; but the engravers merely comment that people who do nothing but sit around all day in a studio and talk to pretty girl subjects ought to be able to clean up on a bunch that have worked themselves down and out every day before the game.

Masataro Ito writes us from Oswego, New York, that he is having excellent success with home portraiture in that city and is creating quite a reputation for his work.

Mr. and Mrs. Bissell have just received word from San Francisco that they are the grandparents of a fine baby boy at the home of their daughter, Mrs. J. F. Magee.

The prizes in the monthly photographic contest at the College were won by Messrs. Kurano, Pace, Nicholoff, Young and Sabin.

The Tennis Club have put their grounds in excellent shape. New back stops have been erected, and the grounds have been rolled to perfect smoothness. Some hot matches are pulled off every evening.

Fred Locke, who has been working the past winter in Philadelphia at newspaper engraving, has returned to finish his engraving course at the college.

Mr. Taylor, of the Bausch & Lomb Optical Co., gave the students a very interesting lecture on the lens question recently. On his next visit he will bring a number of lantern slides and diagrams illustrating his talk.

Anton Zmuda has finished the photographic course and returned to his home city, Harvey, Illinois, where he will engage in home portrait work.

### Well Worth Trying

Stiefel's Pumice Stone Soap is prepared by J. D. Stiefel, of Offenbach-on-the-Main, Germany, the pioneer manufacturers of medicated soaps, whose products have for more than a quarter of a century been the universally recognized standards in the field—as any physician or druggist will confirm.

Unlike so many soaps offered to the pub-

lic as hand cleansing agents, which are merely modified household scouring soaps, Stiefel's Pumice Stone Soap has been originally and exclusively devised for toilet use. Compounded on the strength of its manufacturers' unrivaled experience, it embodies the essentials of a rational and efficient hand cleansing soap, viz., an absolutely pure, neutral soap base and perfectly uniformly distributed, even-sized particles of a specially prepared, absorbent and resilient material. It rapidly removes accumulations of dirt and dead outer skin, opens up the pores and gently stimulates the innumerable little glands of the skin to impart to it their life-and-smoothness-bringing secretion. It does its work instantly with cold or lukewarm water and very little friction. Harsh, unyielding friction and the frequent use of hot water, necessitated by imperfect hand cleansing soaps, leave the hands rough and chapped—ready victims to dust and dirt.

Invaluable for workers in machine shops, foundries hot-houses, automobile garages, etc. A boon to the photographer, amateur or professional, for it will do what no other hand cleanser can achieve,—remove developer stains.

If your druggist or photo materials dealer does not keep it, send his name and address, together with ten cents. One full sized cake will be sent you by Schering & Glatz, 150-152 Maiden Lane, New York.

### "Doing It Right"

The Photo Products Company have made rapid progress in the last year. The products made by this concern include paper for professional portrait, commercial, view and amateur work. Their policy of free samples to professionals is certainly very convincing of their absolute confidence in their papers. We suggest that professionals take advantage of the generous offer of this enterprising concern. We understand their prices are very attractive. The best way to learn them is by requesting a price list. They also publish a very complete manual of developing paper manipulation called "Doing it Right." If you haven't a copy, ask for one—it's free.

### Hammer's Little Book—The Ninth

The ninth edition of "Hammer's Little Book" is just to hand, and reminds us that it has been some time since we advised all our readers to send for a copy. It is ab-

solutely free, and contains a wealth of information. A copy in the hands of any photographer would answer many questions and help him over the numerous difficulties that are perplexing him. Under Exposure, Over Exposure, Approximate Exposure Table, Table of Comparative Exposures, Tank Development, Improving the Character of Negatives, Hard Negatives, Weak Negatives, Halation, Stains, Spots, Fog, and many other chapters of like title are contained between the covers. Write for a copy today before the matter slips your mind. Address, Hammer Dry Plate Company, St. Louis, Missouri.

### **Aeroplane Horses**

Aeroplanes are not easy subjects for the camera, and racing horses require some experience and skill in connection with suitable apparatus for their successful portrayal. When it comes to an aeroplane racing horse, the difficulties are multiplied. Ted Hanson, the photographer who follows the trotting horses all over the country with his Hall camera, evidently finds little difficulty in meeting any requirements. The new Hall camera catalogue contains one of his pictures of an aeroplane horse in action, and it is an excellent example of high speed work. It shows the capabilities of the Hall cameras most convincingly. And there are over fifty other fine examples of high speed work in the same catalogues. It is really dangerous to one's peace of mind getting one of these catalogues unless he is prepared to purchase a Hall camera at once. But the prices are so reasonable that the desire to possess can be easily appeased. There is a Hall pocket focal plane camera almost ready to be placed on the market, we are advised. Get this new catalogue by addressing, Hall Camera Company, 14 Dunham Place, Brooklyn, New York.

### **Opaque Projection of Large Objects**

A new realm of usefulness has been opened up for optical projection by the unique Balopticon recently devised and constructed by the Baush & Lomb Optical Company. Designed for the projection of opaque objects and illustrative material direct on a much larger scale than ever before attempted, it has proved entirely practical in operation and presents new possibilities for this attractive form of projection.

The original model was devised as an

experiment in response to the request of the National Cash Register Company, of Dayton, Ohio, for an instrument of sufficient scope to project on the screen an entire section of a cash register. So satisfactorily did the model accomplish this end, even in its then crude state, that the official of the company who came from Dayton to inspect it ordered four of the instruments to be made up.

These instruments they are now using to good purpose in educating their salesmen to a more intimate knowledge of their product and of the efforts being made to market it. A section of a cash register is placed in the Balopticon and shown on the screen with the mechanism in actual operation. Large advertisements and placards are also projected for purposes of discussion and comparison.

In addition to these commercial uses, this new lantern can be used to advantage in projecting full-page illustrations from large magazines, or photographs and engravings of any size up to twenty inches square. In educational work, too, lie some of its greatest possibilities for service as it is especially suitable for projecting large embryos and anatomical specimens. All subjects are clearly shown in their natural form and coloring in greatly enlarged images, conveying a certain sense of the true relation of the parts projected.

### **Ernon Kino Apparatus**

The Ernon Kino Apparatus is a perfect moving picture machine for use in the school, in scientific work, and in the home. We have just received a copy of an English edition of a booklet describing it and its working in full detail, the booklet being one gotten out by the American agents, the Ernon Camera Shop, 18 West Twenty-seventh Street, New York. Some two years ago we had the pleasure of trying out the first of these cameras to reach this country, and can assure our readers that it is all that it is claimed. Our occasional contributor, Doctor Gustav Eisen, found it being used extensively by scientific bodies in Germany, and spoke in the highest terms of its capabilities. It is, of course, not suited to the requirements of large halls and audiences, but for school and home work it is perfect in every detail. It is mechanically perfect, and built and finished with the same

degree of excellence that characterizes the Erneman line of cameras. Copies of the booklet can be obtained upon request to the agents named above.

### Enlargement of "The Implet"

In accordance with the desire of hosts of readers, *The Implet* is to be forthwith enlarged. The number of its pages will be increased, and its scope will be widened so as to embrace all phases of moving picture progress and activity. *The Implet* does not compete with any existing publication. It does not clash with papers that deal with the dramatic aspect of the moving picture. It aims to address exhibitors, manufacturers, and the trade. It deals with the technical, artistic and educational aspects of the picture. It stands for picture progress; the uplift of quality and the popularization of the picture amongst all classes of society. It is newsy, bright, informative and unconventional. For sample copies address, *The Implet*, 102 West 101st Street, New York.

### A Timely Warning

Warm weather will be coming on later, and it will be well for those who own a bottle of strong ammonia to remember that it is a solution very highly charged with ammonia gas. As the contents become warmer, less of the gas is held in solution, and quite hot weather has been known to blow out stoppers or burst the bottle in case the stopper had become fixed. When a fresh bottle is opened for the first time the ammonia is generally found to be under considerable pressure, even if the atmosphere be not warm. It is advisable to hold the neck of the bottle away from the face while removing the stopper to minimize the risk should the contents spurt out. It is not so long ago that we read of a young man in England losing an eye by a drop reaching that organ as the ammonia spluttered upon release of the cork.

### The Victor Cabinet

A new circular, just off the press, describing the improved Victor Studio Flash Cabinet, has just reached our desk. We note a difference in the framework of the base, the present style being much neater, and it is also lighter. Another improvement which has been made is in arranging it so that the Cabinet can be tilted to give the front any desired angle. A new illustration shows

the jump spark igniting system, a little box holding the six dry cell batteries, with the sparking coil on top of it, and the little rack at the lower left-hand corner of the Cabinet holds twelve small porcelain flash pans, which can be loaded with powder in advance, so that when operating, a new charge of powder can be put in as quickly or a little quicker, perhaps, than a photographer can change his plate-holder on his camera. The jump spark igniting system works by the pressure of the same bulb that operates the shutter; and, it never fails. Send your inquiry today for this and other interesting circulars covering the goods manufactured by this enterprising firm. Address, James H. Smith & Sons Company, 3541 Cottage Grove Avenue, Chicago, Illinois.

### Notes From The Illinois College of Photography

Frank R. Fraprie, editor of *American Photography*, of Boston, made a special visit to the College on April fifth. Brother Fraprie knows the editing business from A to Z, and many other things, and we look forward to his next visit with a great deal of pleasure.

C. W. Dishinger, student of 1910, called on us last month with three enormous frames covered with the pictures of about two hundred and fifty members of the Mississippi Legislature. The sets were to be copied on 29x24 negatives, and Mr. Dishinger came about five hundred miles to use the college outfit for the work. We also received very pleasant visits last month from Max Freudenburg, student of 1906; A. F. Wilson, of 1910, and Miss Hayes, of 1911.

President L. H. Bissell was elected president of the National Good Roads Association of Illinois last month at the Convention held in Effingham. The purpose of this organization is to establish a system of modern hard roads from Coast to Coast, and the Convention at Effingham covered the Illinois section of the work.

Several foreign students have enrolled during the past month, as follows: H. T. Manabe, Japan; R. S. Noda, Japan; Nagen-dranath Ghose, India; F. Kunishige, Japan.

Henry H. Blank and Fred C. Miller, who have just finished the photographic course, are engaging in home portrait work in Milwaukee.



# CAMERA WANTS

Advertisements of the nature shown below will be inserted under this heading at the rate of fifty cents each insertion, for twenty-five words or less; each additional word, two cents extra. Those of positions wanted inserted free. No business advertisements will be accepted.

**FOR SALE** On easy payments, studios in Central California towns, fully or partially equipped as desired. Address B. B. Wright, St. Helena, Cal.

**FOR SALE** Century Grand Senior 5x7, series VIIA Zeiss Protar No. 8, series V No. 2 wide angle, Volute shutter, sight finder, color filter, five extra plate holders, film pack adapter, case and strap; complete cost \$190.00, sell \$125.00. Or sell lenses and shutter for \$75.00, cost \$115.00. Excellent condition. Address E. E. Bement, Concord, Cal.

**FOR SALE** Studio, only one in town, 1,500 population, nearest studio 20 miles; Century Grand studio outfit, Dallmeyer lens, etc. Six rooms, rent \$10.00, including living rooms, north light, electric lights, phone, city water. It sold in two weeks, \$200.00 takes it. The Wallowa Studio, Box 372, Wallowa, Ore.

**POSITION WANTED** By experienced young lady retoucher and receptionist. Address D., care "Camera Craft," San Francisco, Cal.

**POSITION WANTED** By Japanese as a retoucher or all-round man in first-class studio. T. Y., 2917 Prairie Ave., Chicago, Ill.

**FOR SALE** Latest model Conley 5x7 view camera, leather bellows, B. & L. 3-focus R. R. lens and shutter, carrying case, tripod, 6 plate holders; all brand new; cost \$48.50, sell for \$35.00, or trade for Graflex without lens. Address H. W. L., care "Camera Craft," San Francisco, Cal.

**FOR SALE** Good live photographic business. Only studio in town of 6,000 in Central California; extensive manufacturing, also university, backed by richest fruit farming country in America. Studio fitted to 8x10 with every convenience for running a first-class portrait business. Reason for selling, I have bought a ranch. This is a good bargain. Do not write unless you have \$800.00 cash. Address Rancho, care "Camera Craft," San Francisco, Cal.

**YOUR VIEWS** would look much better painted in nature's colors. Unmounted prints up to 5x7, hand colored, 25 cents each (portraits and printing-out papers excepted). The Little Studio, Bernard, Maine.

**FOR SALE** Studio in town of 1,500, good country, first-class outfit, good business, good location; will sell very cheap if taken now. Address D. E., care "Camera Craft," San Francisco, Cal.

**EXCEPTIONAL OPPORTUNITY** For first-class photographer in the best town in Central California. One other studio in the city, but the right kind of a man can get ninety per cent of the business. Town is a wealthy center of the wealthiest district of the interior State. Only a first-class man will find the field congenial and profitable. Address Box 271, Porterville, Cal.

**FOR SALE** Cheap, 5x7 Seneca camera No. 8, fitted with Kollon shutter and Dynar F:6 lens of 7-inch focus. Outfit complete with leather carrying case and four supplementary lenses to fit the Dynar lens. Outfit cost \$68.00, but will take \$35.00. Must sell at once. Condition guaranteed. H. B. Brockett, Sundance, Wyo.

**STUDIO WANTED** To buy or rent with option. In town of between 1,500 and 2,000 and not over 25,000, on California coast or Oregon. Ed Hathaway, Sebastopol, Cal.

**FOR SALE** Ground-floor studio with living rooms, cheap rent, gas, water and electricity, fine climate, churches, schools, etc. Average business over \$200.00, price \$500.00; no triflers. Address Business, care "Camera Craft," San Francisco, Cal.

**FOR SALE** 5x7 Seroco long-focus camera and outfit, also Library of Amateur Photography, new. Will exchange for small Reflex. Willie McConnachie, Fordville, N. D.

**POSITION WANTED** In first-class studio only by experience, strictly temperate, good character, can finish, operate, assist in retouching, developing, etc. Will start on small salary with a chance to learn more. Best references. T. J. Brown, Box 233, McRae, Ga.

**ARTISTIC OPERATOR** Open for engagement, first class only, electric or daylight, expert in retouching and working in backgrounds. A No. 1 credentials; salary \$25.00. Address Operator, care "Camera Craft," San Francisco, Cal.

**FOR SALE** The leading studio in Goldfield, Nevada. First-class equipment; doing a business of about \$3,500 a year; building 30x80, operating room 30x40, north light, rent very reasonable, frames and mouldings and Ansco agency. Will sell for \$600.00, half down, balance in monthly payments. A good bargain; must leave on account of heart trouble. Or will take \$300.00 cash and retain cameras, lenses and backgrounds. Address Weyle Art Shop, Box 487, Goldfield, Nev.

**PORTRAIT LENS** 8x10 Iris diaphragm, genuine Clement Gilmer-Paris, with new Packard shutter, fine definition and plastic effect F:4, perfect condition. Have two \$27.50. Drawer A, Lemoore, Cal.

**POSITION WANTED** A permanent one by an experienced operator and retoucher; thoroughly reliable and capable of taking charge of a studio. Address D. A. Berninger, 32 Laurel St., Roxbury, Boston, Mass.

**POSITION WANTED** By good view operator and Kodak salesman, age 24, willing to go to any part of the world; can speak four languages. Address Kodak Expert, care "Camera Craft," San Francisco.

**FOR SALE** One 8x10 view outfit complete, one 8x10 portrait box and shutter, and one 5x8 portrait lens; all in A1 condition; reason for selling, going out of business. A bargain for some one. For particulars write Photographer, 646 St. Peter St., St. Paul, Minn.

**AGENT WANTED** To sell Metallic shutter release, low prices, superior make. For particulars address Wm. Hammer, 89 Ave. B, Rochester, N. Y.

**FOR SALE** The best equipped little studio in the busiest town in Oregon; Eugene has a population of 12,000, and is a University town; business established 15 years; studio newly equipped throughout recently; have made good, and wish to retire; better opportunity now for increasing business than there has ever been; a fine chance for a fine worker; no formidable competition. Address, S. D., care "Camera Craft," San Francisco, Cal.

**FOR SALE** Lease or exchange for California realty, old established studio business, including building and lot, in the rapidly growing town of Merced, 3,500 inhabitants, county seat of Merced County; price \$2,500.00. Write for particulars. W. T. Hohenshell, Merced, Cal.

## CAMERA WANTS—Continued.

**FOR SALE** In booming town of 18,000 in central California, a first-class studio. Outfits new, north light on second floor of good office building. Doing a good business the year around of about \$6,000 per year. Will stand the closest investigation; or will trade for studio in Oregon or Washington. Address M. B., care "Camera Craft", San Francisco, Cal.

**FOR SALE** Leading studio in wealthiest town of southern California, population 35,000; established in 1894; low rent, five years' lease, last year's business \$5,000. For particulars address or call on P. O., care "Camera Craft", San Francisco, Cal.

**FOR SALE** Studio in Denison, Texas. Doing good business. Cheap and a good opportunity. Write for particulars to C. A. Hoffman, Denison, Texas.

**FOR SALE** Photo studio in one of California's best cities of 40,000 population. Very low rent and long lease. Conditions ideal and a real bargain. Address B. B., care "Camera Craft", San Francisco, Cal.

**WANTED** Good all-around man, must be A No. 1 retoucher and finisher. Send samples of work, references, and salary wanted in first letter. Steady position. W. M. Gray, 219 W. Central Ave., Albuquerque, N. M.

**FOR SALE** Fine studio in Portland, Ore., best location in city. Cannot look after it and will sell at a bargain. Address P. S., care "Camera Craft", San Francisco, Cal.

**FOR SALE** Leading studio, progressive city of 12,000; new brick building, business center; rent, \$35.00; lease to January, 1915, renewable; operating room, 30x40, others in proportion; all steam heat; business 1910, \$3,500.00; enjoys patronage of leading people, and Vancouver Barracks adjoining; invoices over \$1,600.00; fitted complete to 8x10 portrait and view; refused \$1,500.00, but protracted illness compels sacrifice at \$1,000.00; plans, photos, full particulars to those meaning business. Address, W. G. Emery, Vancouver, Wash., U. S. A.

**THE BLACK HILLS** Of South Dakota is the "Switzerland of America," for beautiful mountain scenery; send 25 cents for one dozen selected post cards in nature colors, or \$2.00 for 100; no two alike. W. B. Perkins, Lead, Black Hills, S. D.

**WANTED** A studio in California, Oregon or Washington; give full particulars and best cash price. C. M. Snyder, 619 6th Avenue, Leavenworth, Kansas.

**WANTED** Goerz double anastigmat lens, Dagor series 111, speed F:6.8 in volute or compound shutter; must be bargain. H. C. Brundig, 342 South Hill Street, Los Angeles, Cal.

**FOR SALE** Varney studio; an up-to-date, fully equipped, ground floor studio in one of the best locations in Chicago; exclusive patronage; cabinet prices from \$6.00 to \$15.00 per dozen; established 21 years; will show clear profit of over \$5,500.00 per year; 50,000 negatives; a paying proposition; \$7,500.00 takes it; owner wants to retire; if interested, address G. W. Varney, 3945 Drexel Boulevard, Chicago, Ill.

**FOR SALE** No. 5B, A1 Vista Panoramic camera taking pictures 5x4, 5x6, 5x8, 5x10 and 5x12 inches. New. Cost \$30.00; a bargain at \$20.00. Henry A. Swanson, Rte. 1, Box 22, Swea City, Iowa.

**TESSAR** One 11B B. & L. Zeiss Tessar, fitted in Volute shutter. Good as new. Sell for \$49.60. Z. T. Briggs, Photo Supply Co., 914 Grand Ave., Kansas City, Mo.

**4A SPEED KODAK** Complete with carrying case, plate attachment, Goerz Dagor lens; condition fine a big bargain at \$90.00. Z. T. Briggs Photo Supply Co., 914 Grand Ave., Kansas City, Mo.

**FOR SALE** Empire State No. 2, 5x7 fine view camera, with first-class rapid rectilinear lens in Regno shutter, carrying case and three plate holders; all in good condition; positively will sacrifice, \$30.00. Edw. Cochems, San Marcos, Cal.

**VELOSTIGMAT** One 5x7 Velostigmat Series 1, fitted in Optimo shutter, good as new; \$32.50. Z. T. Briggs, Photographic Supply Co., 914 Grand Ave., Kansas City, Mo.

**POSITION WANTED** Lady as carbon printer, also developing papers or first-class finisher in portrait and commercial. Address, N. Scott, 8 Chess Street, Mt. Washington, Pittsburg, Pa.

**POSITION WANTED** By experienced all-round workman in a first class studio. Address, A. R. Martens, Scribner, Nebr.

**WILL EXCHANGE** New Cooke Portrait lens, series VI, 13-inch focus for Goerz Dagor 9½ or 10¼-inch focus. Difference in proportion to list price. Sell for \$125.00 cash. L. C. Bishop, 513 Dean Bldg., South Bend, Ind.

**POSITION WANTED** Managing operator wishes good position in a studio whose object is artistic work; good retoucher, colourist, dark room and outdoor work; five years art school training. Apply Aspden, 26 Farrar Rd., Bangor, N. Wales.

**POSITION WANTED** As receptionist or general assistant in California in autumn by clever up-to-date saleswoman, thoroughly experienced; last four years head receptionist to Lafayette, London. Lafayette says: "Excellent saleswoman, can make the most difficult clients satisfied." Can also operate, retouch and finish; highest class studio only. Write, Miss Eva Barrett, Bishop Stortford, Herts, England.

**POSITION WANTED** By an expert lady retoucher. Several years experience in leading studios. Can operate and do reception room work, also photo tinting in oil. Address Mrs. J. L. M., care "Camera Craft", San Francisco, Cal.

**STUDIO WANTED** in California, no competition under 3,000, unless settled country, without instruments. Must be cheap. Address L, 58 Elliott Park, San Francisco, Cal.

**WANTED PRINTS** Unmounted of South Dakota, Indians, Indian life and customs. Indian monuments, etc. C. B. Bolles, Lock Box 351, Aberdeen, S. D.

**SALESMEN WANTED** A number of experienced men to sell direct to the photographers, line of photo mounts and folders. Liberal commission basis. Must know the trade; territory to be divided between Salt Lake and Los Angeles. Answer with references. Walcutt Brothers Company, Photo Mount Dept., New York City, N. Y.

**POSITION WANTED** By high-grade operator, capable of handling large volume of first-class work, with experience as manager. Now employed at good salary; references; married. Address N., care "Camera Craft", San Francisco, Cal.

**FOR SALE** Leading and best studio in the Southwest; very finest equipment, and will guarantee it to be the best business proposition in the country; climate best in the United States. Reason for selling, must devote time to promotion of invention. Address M. R. W., care "Camera Craft", San Francisco, Cal.

**POSITION WANTED** By high-grade view operator, interiors or exteriors; years of experience; habits and references the best. Can go anywhere. Give full particulars of work to be done and best offer in first letter. J. C. Miller, 145 N. Robey St., Chicago, Ill.

**POSITION WANTED** By young lady who is first-class retoucher; can also operate and color photographs in oil and water colors; has worked for the leading photographers in San Francisco and Portland. Address Mrs. E. M., care Mrs. A. Edmonds, 66 Carl St., San Francisco, Cal.

**POSITION WANTED** By gentleman, in good studio in California, as operator and finisher. I can do the work and can take the position soon; best references. Address J. E. McLain, Bluffton, Ind.



## CAMERA WANTS—Continued.

**FOR SALE** Good paying, well-equipped, nicely located studio in Oregon college town of 5,000 population. Bargain for quick sale; invoices for nearly \$900.00; \$300.00 cash will handle. Student enrollment for 1911 over 1,500; fine surrounding country, three railroads, two colleges in nearby town. Address R. C. M., care "Camera Craft," San Francisco, Cal.

**GRAFLEX** Auto 4x5 for sale, first-class condition. Without lens, but complete with 3 plate holders, magazine plate holder and film pack adapter; also developing tank, rack, masks, etc. Original cost as offered \$90.00. Will sell \$40.00. R. P. Prentys, 840 Merchants' Exchange, San Francisco, Cal.

**FOR SALE** Very cheap latest model, brand new 8x10 New York Studio camera with cabinet attachment and stand. Address Box 131, Ridgefield, Wash.

**FOR SALE** Or rent, six-room cottage with large south sleeping porch, porcelain bath, sanitary plumbing, electric lights; studio in yard with fine skylight. In Menlo Park, San Mateo, five minutes' walk from station. Fruit trees, stable, chicken yard, garden. Rent \$22.00. No photographer in town. Address I. L. C., care "Camera Craft," San Francisco, Cal.

**FOR SALE** Studio in St. Joseph, Mo. One of the best locations in the city. For particulars write M. W. Bode, 515½ Edmond St., St. Joseph, Mo.

**FOR SALE** Stereoscopic view plant. Nearly 10,000 transposed, original negatives in iron file boxes; thousands of duplicate; catalogue in linotype, also titling linotype; pigeon-hole cases, with containers, showing sample picture; copyrights, stock and lenses. At absurd prices. Ingersoll, R. R. No. 5, Buffalo, Minn.

**FOR SALE** A new 5x7 Film Premo No. 1, Planograph lens, B. & L. auto shutter. Regular price, \$25.00. Will sell for \$19.00. Wm. F. Uhlman, 716 Francis St., St. Joseph, Mo.

**FOR SALE** Studio in live Northwestern Iowa town. For more information, address G. S., care "Camera Craft," San Francisco, Cal.

**FOR SALE** A photo car in good condition, equipped with complete 8x10 outfit; located at Pine River, Minn. Will sell cheap for cash. Address A. P. Nelson, Brainerd, Minn.

**FOR SALE** A 3¼x5½ Film Premo, never used; R. R. lens, B. & L. auto shutter. List price, \$18.00. Will sell for \$10.00. Wm. F. Uhlman, 716 Francis St., St. Joseph, Mo.

**FOR SALE** My studio, situated on one of the best avenues in Minneapolis, in running order and doing a good business. Will make a sacrifice price for immediate sale. Address D., care "Camera Craft," San Francisco, Cal.

**FOR SALE** Or rent, studio with or without outfit. Good location and large territory to draw from. L. H. Halverson, Fertile, Minn.

**WANTED AT ONCE** A young man with some experience to help in all-around studio work. Scandinavian preferred. Here is a good chance for a good, sober young man. M. M. Belgum, New Rockford, N. D.

**FOR SALE** Studio in county seat of 1,200. Ground floor, large single-slant light, large operating room, city water, electric lights, furnace heat, 8x10 Century outfit with Goerz lens. Will sell building on easy terms or rent reasonable. Reason for selling, can't stand inside work. Will take \$500 for fixtures and stock. Don't write unless you have cash and mean business. Address XXX, care "Camera Craft," San Francisco, Cal.

**FOR SALE** Half or entire interest in modern studio in rich farming district of Minnesota. Equipped up to 11x14, large single-slant light, city water, electric light, steam heat. Commodious reception and operating rooms, dressing, finishing, printing and dark-rooms. Population 3,000. County seat. 5,000 registered negatives; duplicate work large. Rent only \$12.50, and located on Main St. Busy season is here. Address Dahl & Stoll Art Studio, Marshall, Minn.

**FOR SALE** One 3A Folding Pocket Kodak fitted with Goerz Dagor lens No. 1A and compound shutter; in first-class condition. Lists new, \$76.90; will sell for \$60.00. Wm. F. Uhlman, 716 Francis St., St. Joseph, Mo.

**WANTED TO BUY** Good photo business on contract payments or will trade good South Dakota or Northern Minnesota land for studio. No old junk wanted. If you are interested, address J. F. G., care "Camera Craft," San Francisco, Cal.

**POSITION WANTED** By all-around man who does first-class work, with many years' experience. Would like to work in an up-to-date studio. Address A. T., care "Northern Photo News," Andrew Tronnes, Box 302, Long Prairie, Minn.

**WANTED, Retoucher** One who will help in other branches if necessary. State salary and send photo of self if convenient. Address Bert Crowell, Rochester, Minn.

**PRICE \$250.00** Three-year lease on lot at \$5 per month. Penny picture and up to 8x10 studio. Building 11x22, including backgrounds and stock. Address L. M. Perry, 2917 27th Ave., Minneapolis, Minn.

**FOR SALE** Second-hand 11x14 mahogany New York studio outfit complete with attachment. Al condition. Price, \$65.00. Also second-hand outside display case, \$28.50. Write for more description to Northern Photo Supply Co., Minneapolis, Minn.

**FOR SALE** New Pocket Premo C, 3¼x5½. For plates and film pack, \$16.50 list. Sell for \$12.00. Wm. F. Uhlman, 716 Francis St., St. Joseph, Mo.

**\$30.00 TAKES** 5x8 Cooke lens, Series III, with back extension lens, auto shutter, shutter slightly out of order. Complete lens alone cost \$66.00. Address Chas. H. Schultz, Davenport, Wash.

**FOR SALE** Only studio in town of 1,500 in Southern Oregon; with or without building, rent reasonable. Notions in connection with studio. For information, address Box 263, Central Point, Ore.

**WANTED** Man or man and wife, capable of taking entire charge of California studio that is doing a good business. Must be of good character and ability. Address A. C. F., care "Camera Craft," San Francisco, Cal.

## N O W I S T H E T I M E

To have your camera put in perfect working condition. Look it over carefully or let us do it for you. The shutter may be out of order, the bellows may be full of unsuspected pinholes, some metal parts may be too loose or bent and binding, some wooden portion may be worn or warped. A thorough overhauling will cost much less than wasted plates or film, to say nothing of the vexation and annoyance of poor results. We do all kinds of camera repair work, do it well, and our charges are moderate.

**G. E. BIDDELL, Camera Doctor : 693 Mission St. Cor. 3d, San Francisco**



# Eastman Kodak Company

ROCHESTER, N. Y., *The Kodak City.*

## IN TRAINING.

I told the readers of this magazine last month of my resolutions for the coming season, and I am not ashamed to tell of some of the mistakes I have made and some of the things I have accomplished since I have been in training. If you read these pages last month, you will remember of my experience with a friend who seemed to have been able to get all the pleasure there was to be had out of photography, while I merely skimmed the surface. It was his album of Kodak pictures that made me sit up and take notice of the good things I had been missing and set me to work with a purpose in view. I am going to get the good things this year for my album.

I have found as much pleasure in making enlargements from some of my good negatives that are two or three years old, as I did in printing from them when they were first made. I bought a Brownie Enlarging Camera and the Illuminator to use with it, and have found good use for both of them.

My first attempts at enlarging were made with the enlarging camera and the results were fine. The Illuminator enables me to do the work evenings, and the light always being the same, I can duplicate my results, as I have marked the time necessary for making the enlargement on the margin of the negative. The apparatus is so simple and well known that it is not necessary to speak of it here, but I would advise anyone using an enlarging camera to always make test exposures.

I didn't think it necessary until I had lost a couple of sheets of 8 x 10 bromide paper, which would have made sixteen test strips, each one inch wide. I use two test strips when I am not sure of the exposure the first time, and my enlargements have been perfect. I have used smooth Royal Bromide for most of the work I have done so far, because I like the effect of this paper

for the brown prints, but some of the black prints have looked so well on the creamy tinted stock of this paper that I have not re-developed them. Oh, I am getting to be an expert alright and I am surely getting results.

I had so many compliments on my work with the enlarging camera that I gave most all of the first lot of prints to my friends, but now that I am getting more accustomed to the flattery, I find I am better able to hold on to the prints. I advise them to buy an enlarging camera, and make their own prints.

Now for my latest adventure. The course I took in manual training last winter has come in very handy, as I have been able to make an enlarging apparatus for sizes larger than 8 x 10, using my Kodak next to the Illuminator and an easel on a track. The results have been more than satisfactory, though I have not tried making enlargements larger than 11 x 14 inches.

The Illuminator, as you probably know, is much the shape of an oblong hat box that has been cut in two in the center. The top, bottom and end are flat surfaces, the sides being a curved surface, which is white on the inside to reflect all the light from the one hundred candle power lamp which is enclosed in the box.

The flashed opal glass which diffuses the light seems to let all the light through, but as evenly at the corners as in the center, so that when the film negative is placed in a frame and fitted in front of this glass, the light passing through the negative is as strong at the edges as in the center, but this is not telling of my apparatus.

I built a frame which looks like an ordinary ladder, except that it is not so heavy and has only three cross pieces to hold it together. The sides are smooth to allow an easel to rest on it and slide back and forth. The easel is two by three feet, made of soft wood and supported by two triangular pieces, which

# Eastman Kodak Company

ROCHESTER, N. Y., *The Kodak City.*

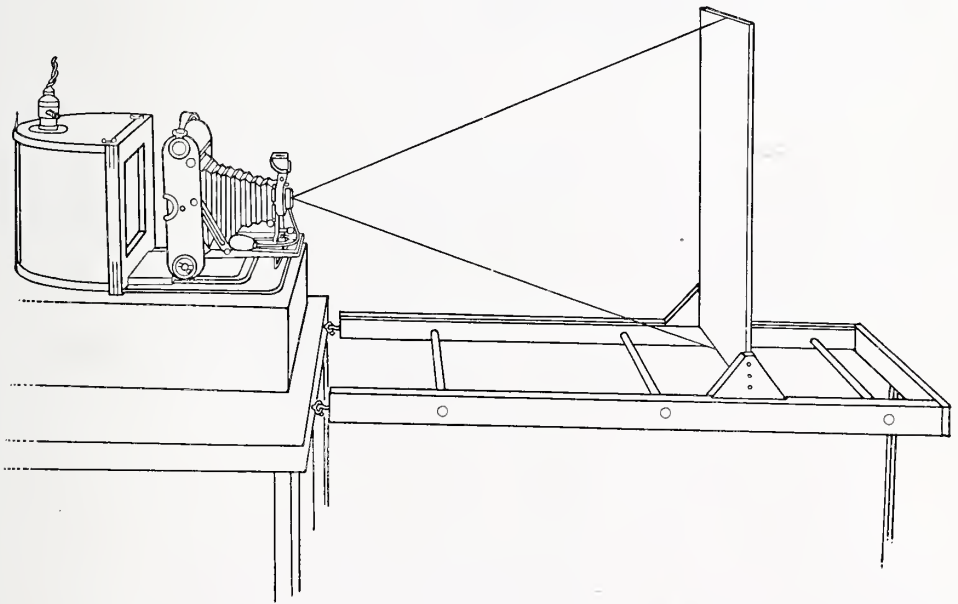
are notched at the bottom to allow them to fit over the frame of the ladder or track on which they slide.

A leg at one end of this track, the other end hooked to screw eyes in the table, is ample support for this part of the outfit. I then secured a box that was large enough to hold the Illuminator and my 3A Kodak and high enough so that when set on the table, it would place the Kodak on a level with the center of the easel. By cutting notches in the ends of the box and resting it on the track, one can either move the box or the easel to get the size enlargement wanted, and then focus the Kodak to get the enlargement sharp.

I find the Kodak bellows rather short, so I have to set the Kodak several inches from the negative and cover the space between the two with a dark cloth, but as I only use this apparatus for sizes larger than 8 x 10, the space is very small. To hold the Kodak parallel with the negative, I have placed a wooden block between the Kodak and

the Illuminator so the Kodak fits against the block and the block against the Illuminator and my Kodak is always parallel with the negative, and the easel parallel with both.

The enlarging has been so interesting that I have not had time to do much work with my Portrait Attachment, but I am going to take it with me on a hike to the woods, and I may be able to show some of my work with it soon. The Velvet Green paper is too slow for enlarging, but I have made some beautiful prints with it from some of last summer's negatives. I am going to make some negatives purposely for green prints, so my album will have variety to it, and I am going to use it for a good many of my post cards this summer, for I am going to develop my films in camp and send post cards of my own negatives to the folks at home instead of buying those colored cards, which really mean nothing to the friends who get them.

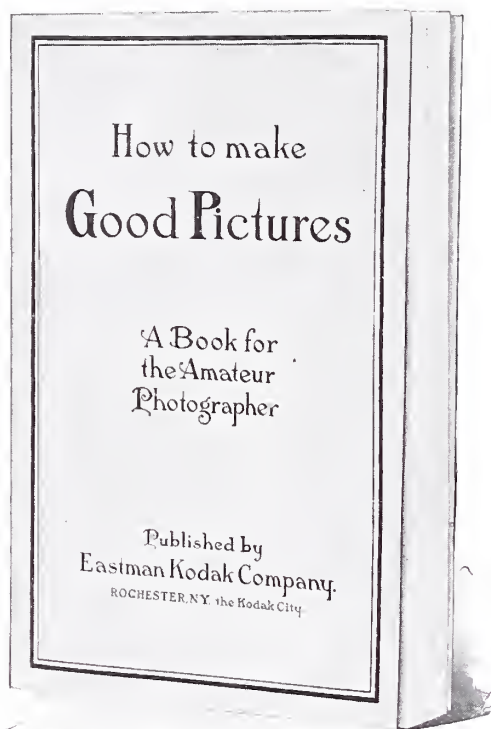


Showing Illuminator, Kodak and Easel in position as explained above.

Please Mention Camera Craft when Corresponding with Advertisers.

# Eastman Kodak Company

ROCHESTER, N. Y., *The Kodak City.*



## *It Tells All About It.*

As the name implies, "How to Make Good Pictures" is a book of the most direct, simple and practical instruction on the subject of picture making and should be in the hands of every owner of a camera.

The 160 pages are profusely illustrated with halftones and diagrams illustrating the various processes, which have been reduced to the simplest form consistent with good results. The price of the book is nominal considering the comprehensive manner in which the great number of subjects are treated.

How to Make Good Pictures,     -     -     -     \$ .25

*At your Dealers.*



Much of the beauty of a photographic print depends upon the color or tone in which it is rendered.

# KODAK

The logo features a large, stylized 'V' on the left and a large, stylized 'G' on the right. A horizontal banner connects the two, containing the words 'VELVET GREEN' in a serif font. Below the banner, the word 'PAPER' is written in a large, bold, serif font.

## PAPER

Is especially suited for marine or landscape subjects. It is exposed by daylight, developed and fixed like Velox with the regular Velox chemicals. Try a package of Velvet Green Post Cards. You will be pleased with the results.

The EASTMAN KODAK COMPANY,  
ROCHESTER, N. Y.

*All Dealers.*

## *A Word of Importance to Photographers*

# “TESTED”



A few days ago, a representative of a large photographic concern in looking through our sample print department asked how we made the beautiful Sepia Bromide Enlargements we put out as samples, saying they had never been able to duplicate the quality in their Enlarging Department.

It was found that Tested Chemicals were responsible for the superior tone values. In re-developing Bromides, a fused Sulphide is absolutely necessary for the best results. That is the kind we use and market—it is Tested. Don't use Sulphide that is primarily intended for other purposes.

**The EASTMAN KODAK COMPANY,  
ROCHESTER, N. Y.**

*All Dealers.*

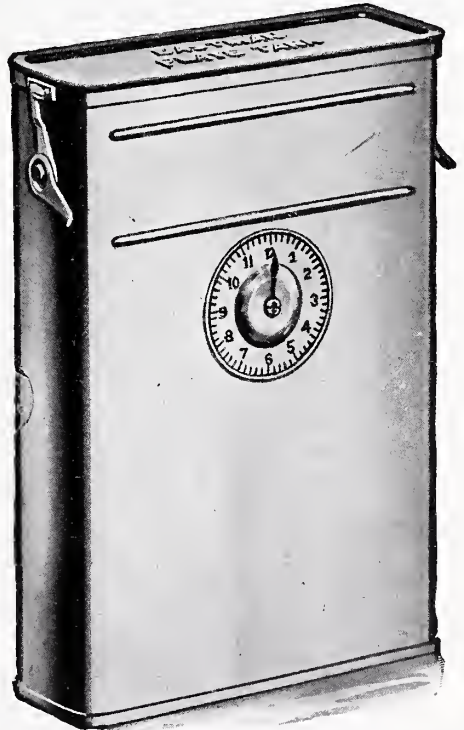
Negatives with the greatest range of tone values are secured by developing in

# The Eastman Plate Tank

As a picture is made up of lights and shadows, so is the roundness of the picture secured by preserving the gradations or halftones between the highlights and shadows.

Tank developed negatives have more halftones, more roundness, because they are free from the degrading influence of fog. Tank developing is most convenient and economical—the results most certain.

The EASTMAN KODAK  
COMPANY,  
Rochester, N. Y.







*She has Confidence in*

## **The Kodak Film Tank Way**

It's a pleasure for there's no dark-room, no stained fingers, no muss, and best of all, no uncertainty. Film Tank results are always better, for the negatives are clean, crisp and free from finger marks and fog. They make better prints too.

Take a Kodak Film Tank on that vacation trip.

*The Experience is in the Tank.*

**THE EASTMAN KODAK CO.,**

*All Dealers.*

**ROCHESTER, N. Y.**



This is the  
actual size  
of the

## *Premoette Junior*

It weighs  
only 11 ounces  
Price, \$5.00

And it's a thoroughly dependable little daylight loading film camera which will make your summer much more enjoyable — for you can carry it with you everywhere unnoticed and make good  $2\frac{1}{4} \times 3\frac{1}{4}$  pictures of everything you care about.

Easy to load and operate, fitted with Ball Bearing Automatic Shutter, tested meniscus lens and direct view finder, it makes pictures of as good quality as can be secured with the largest of cameras.

Get the new, illustrated Premo catalogue, just off the press. It describes this and many other Premos fully. Free at the dealer's, or will be pre-paid to any address upon request.

**Rochester Optical Division, Eastman Kodak Co., Rochester, N. Y.**

# GRAFLEX CAMERAS

Pictures  
like this



and this



are easy  
to make  
with a  
Graflex

With the Graflex you can make snapshots indoors or in the shade. The shutter will give exposures of any duration from "time" to 1-1000th of a second. You can see the image on the ground glass, the size it will appear in the negative, up to the instant of exposure. Focusing scale and finder are done away with—*there is no uncertainty with a Graflex.*

*Send for Illustrated Catalog.*

**Folmer & Schwing Division, Eastman Kodak Co., Rochester, N. Y.**





## A Photograph to be Proud of

There are many persons, events and scenes just as interesting to you as the one depicted in this photograph, that you would be proud to get, and you could get them—have a record of them to cherish—if you had the *right* lens.

If you want to catch action at just the right instant—if you want to be *sure* of absolutely clear definition and perfect illumination of the image, you should investigate the

## Bausch<sup>and</sup> Lomb Zeiss TESSAR LENS

*THE Superior Quality of Bausch & Lomb lenses, microscopes, field glasses, projection apparatus, engineering and other scientific instruments, is the product of nearly Sixty Years' Experience.*

Its remarkable power of gathering and transmitting light gives it *great speed*. Its exact *optical corrections* are *unequalled* by any other lens. Its perfect *flatness of field* and brilliant sharp *definition*, covering the entire field, make it superior for practically every kind of work—action subjects, portraits, groups, landscapes, etc.

A Tessar has wonderful *reserve power*—a capacity to do vastly more than you would commonly require. It is efficient on ordinary occasions, and when the supreme moment arrives a Tessar is ready to take such a photograph as you would be proud of!

It will pay *you* to read Catalog 45H, which describes the best lens for each particular purpose. Write for it today.

## Bausch & Lomb Optical Co.

NEW YORK WASHINGTON CHICAGO SAN FRANCISCO  
LONDON ROCHESTER, N.Y. FRANKFORT

Please Mention Camera Craft when Corresponding with Advertisers.

A Style Designed for Group Prints on Double Weight Paper. The  
Style that will bring the Highest Price for the Family Group.

# THE ARCHITECT

(Listed on Page 41 of 1912 Catalogue)



The flap comes over print, fastened to base with silk tape bow.  
Made in beautiful duplex color combinations  
with two-tone border.

## LOOKS ALL DIFFERENT

The style that will cinch the best grade family group order. They  
can hang it up. You can use this.

*Sample on receipt of seven one-cent stamps.*

---

Designed and Manufactured by

## TAPRELL, LOOMIS & COMPANY

Chicago, U. S. A.

THE LEADING CARD NOVELTY HOUSE OF AMERICA

Please Mention Camera Craft when Corresponding with Advertisers.

# STIMULATES INVIGORATES

Makes your summer trip East  
a distinctive American Tour

## THE NEW ORLEANS-NEW YORK STEAMSHIP LINE

BETWEEN NEW ORLEANS AND NEW YORK

Costs no more to include than an all-rail way  
and you will enjoy the soothing  
restfulness of the trip.

Attendants who can't do enough for you.

### Excellent Cuisine

Rates include Meals and Berth

|  |          |
|--|----------|
| First-class rail to New Orleans and<br>first cabin steamer to New York | \$ 77.75 |
| First-class round trip to New York                                     | 145.50   |
| Second-class rail and second cabin,<br>New Orleans to New York         | 65.75    |

WRITE ANY AGENT

## SOUTHERN PACIFIC

FLOOD BUILDING

PALACE HOTEL

MARKET ST. FERRY STATION





## THE GEARY FOLDER

| COVER                  | CARD        | TINT ON CARD | TISSUE       |
|------------------------|-------------|--------------|--------------|
| Chocolate Enamel Flake | Fawn Kid    | Havana Brown | Sepia Square |
| NO.                    | SIZE CLOSED | FOR PHOTOS   | PER 100      |
| F. W.                  | 7x11        | Square 4x6   | \$7 00       |

The cover of the GEARY FOLDER is made of the finest Chocolate Enamel Bristol with FLAKE PATTERN. A fancy Crest in relief is embossed in the upper part of the cover.

The card is made of Fawn Kid Bristol Stock with a plain plate sunk center.

A Fancy Scroll Border, lightly tinted in Brown around the center and another border around the edge give the card a very artistic appearance. A tissue with a Fancy Square Pattern is used in this folder.

The GEARY will be found well adapted for your best work.

Samples will be sent to you prepaid at our expense on receipt of list price in stamps or money order.

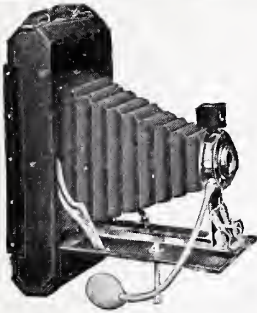
Order them from your dealer. If he cannot supply you, write us direct.

**CALIFORNIA CARD MANUFACTURING CO.**

POTRERO AVE. AND MARIPOSA ST.

SAN FRANCISCO, CALIF.

# The Camera



**That Just  
Takes Hold  
of You**

## **SENCO** THE NEW **Roll Film Camera**

"Yes, its different from the others,—later, wider in scope,—more practical."

"The Senco is the first pocket camera to make possible great negatives."

"Is it like other roll film cameras," you ask?

"No," we answer, "for the others are all alike, even to their advertisements. Every one of them is the 'lightest,' 'fastest,' 'simplest,' 'best.' Therefore they must be all alike."

"But the Senco is different; we said so in the beginning; you will know so when you see it. It is really better."

"See here; —any photographic dealer will send you a Senco on trial, so you can know the truth of these statements yourself."

For an acquaintance with it ask your dealer or write

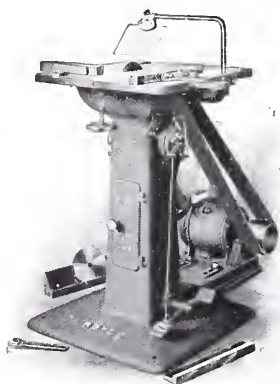
**SENECA CAMERA MFG. CO.**

**Dept. H**

**ROCHESTER, N. Y.**

*"Largest Independent Camera Makers in the World"*

# PLATE MAKING



machines for photo-engraving purposes.

Our well-known line is kept up to the best working efficiency by continual improvement in details. You should become acquainted with our latest designs.

Write for printed matter.

**JOHN ROYLE & SONS, Paterson, N. J., U. S. A.**  
PHOTO-ENGRAVERS' MACHINERY

Pacific Coast Agents: Geo. Russell Reed Co., 645 Battery Street, San Francisco, California.

**G** OERZ Lenses and Cameras  
**O** PEN New Realms of Conquest to  
**E** VERY Ambitious Photographer.  
**R** IGH T in Every Point from A to  
**Z** . A Trial will Prove Them So.



TAKEN WITH THE DAGOR.

**LENSES:** Dagor F:6.8; Celor F:4.5-5.5; Syntor F:6.8. Modern Anastigmats which have stood the Test of Service.

**CAMERAS:** Vest Pocket Tenax,  $1\frac{3}{4} \times 2\frac{1}{2}$  5-16; Coat Pocket Tenax,  $2\frac{1}{2} \times 3\frac{1}{2}$ ; Manufoc Tenax, four sizes; Ango, four sizes and Stereo; Goerz Folding Reflex, 4x5. All for plates or films, combining compactness with widest range of efficiency.

Get our new catalog from your dealer or direct from

**C. P. GOERZ AMERICAN OPTICAL COMPANY**  
321½ East 34th Street, New York, N. Y.

DEALERS' DISTRIBUTING AGENTS: Middle West, Burke & James, Chicago; Hirsch & Kaiser, San Francisco, (Goerz Lenses); Woodard Clarke & Co., Portland, Ore., (Goerz Cameras).

Please Mention Camera Craft when Corresponding with Advertisers.



# Motax

THE BEST INTENSIFIER

## ONE SIMPLE SOLUTION

Strengthens the negative without losing the quality in halftones and highlights; rendering a negative of exquisite graduation and printing quality.

**For Sale by All Dealers**

If you cannot procure it from yours remit 50 cts.  
and we will send a bottle to your address  
by prepaid express

**Kirk, Geary & Co.**  
Sacramento :: California

## LANTERN SLIDES PHOTOGRAPHS POST CARDS

OF THE  
SITES, SCENES, CEREMONIES  
COSTUMES & CHARACTERS

## HOLY LAND and of EGYPT

Pressed Wild Flowers of Palestine on Cards and in Albums  
large and small, ornamental, Biblical and botanical.

Olive-Wood Biblical Cabinets of seeds and other articles.

Raised Maps of Jerusalem.

Bibles and Prayer Books bound in olive-wood.

Olive-Wood and Mother-of-Pearl Souvenirs in great variety.

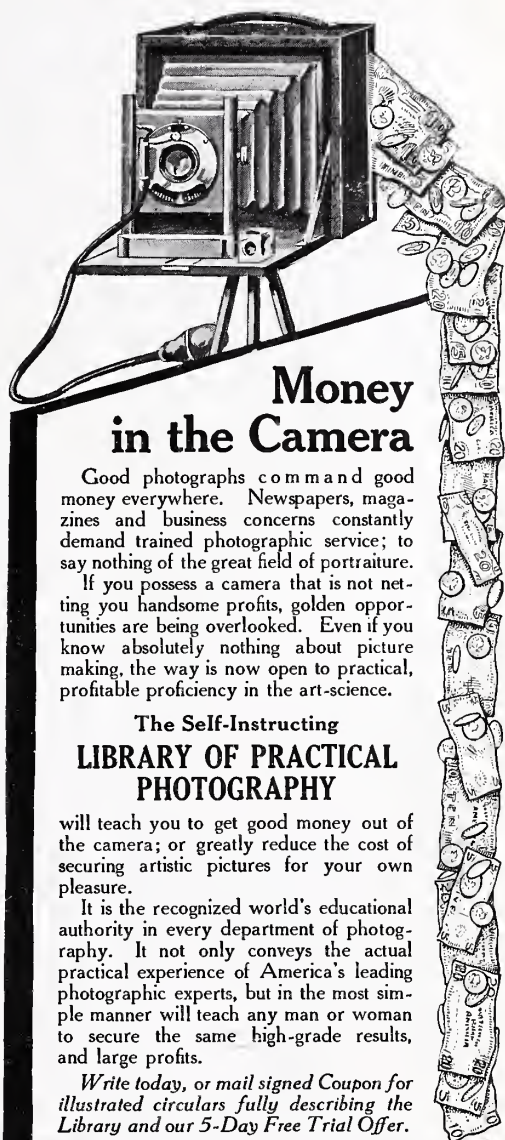
Masonic Gavel and other articles of stone from Solomon's Quarries and of native woods.

*Correspondence Solicited.*

FR. VESTER & CO.

**American Colony Stores**

Jerusalem - - - Palestine



## Money in the Camera

Good photographs command good money everywhere. Newspapers, magazines and business concerns constantly demand trained photographic service; to say nothing of the great field of portraiture.

If you possess a camera that is not netting you handsome profits, golden opportunities are being overlooked. Even if you know absolutely nothing about picture making, the way is now open to practical, profitable proficiency in the art-science.

### The Self-Instructing LIBRARY OF PRACTICAL PHOTOGRAPHY

will teach you to get good money out of the camera; or greatly reduce the cost of securing artistic pictures for your own pleasure.

It is the recognized world's educational authority in every department of photography. It not only conveys the actual practical experience of America's leading photographic experts, but in the most simple manner will teach any man or woman to secure the same high-grade results, and large profits.

Write today, or mail signed Coupon for illustrated circulars fully describing the Library and our 5-Day Free Trial Offer.

### American Photographic Textbook Co.

350 Adams Avenue  
Scranton, Pa.

C. C.  
June



Sign and Mail Today

American  
Photo Text-  
book Company  
Scranton, Pa.

Please send without cost to me, full information regarding your SYSTEM of Photographic Instruction.

- ☐ I am an Amateur
- ☐ I am a Professional
- ☐ I desire to be a Professional

Name \_\_\_\_\_  
Address \_\_\_\_\_

Please Mention Camera Craft when Corresponding with Advertisers.

SATISFY YOURSELF

THAT

# ILEX SHUTTERS

ARE BETTER THAN THE BEST

That the Ilex Wheel-Arrangement, by doing away with the troublesome pump or valve shutter arrangement, has produced

**THE ONLY PERFECT AND RELIABLE  
AUTOMATIC SHUTTER**

with 1-1-300 of a second accurate speed—not affected by temperature, dust, or position of the camera.

In order that you may know what an **Ilex Shutter on your own camera** will do, take it

to an Ilex dealer. Have him send the lens to us so that we can fit an Ilex Shutter to it. Use the camera 30 days, and if you find that you do not get far better results, the dealer is authorized to refund your money.

IF YOU DO NOT KNOW AN ILEX DEALER, SEND YOUR OUTFIT DIRECT TO US.

**WRITE FOR FREE ILEX CATALOGUE**

Full of information on photography, which will be invaluable to you.

**ILEX OPTICAL COMPANY**

:

116 Ilex Circle  
Rochester, N. Y.

## Salesmen

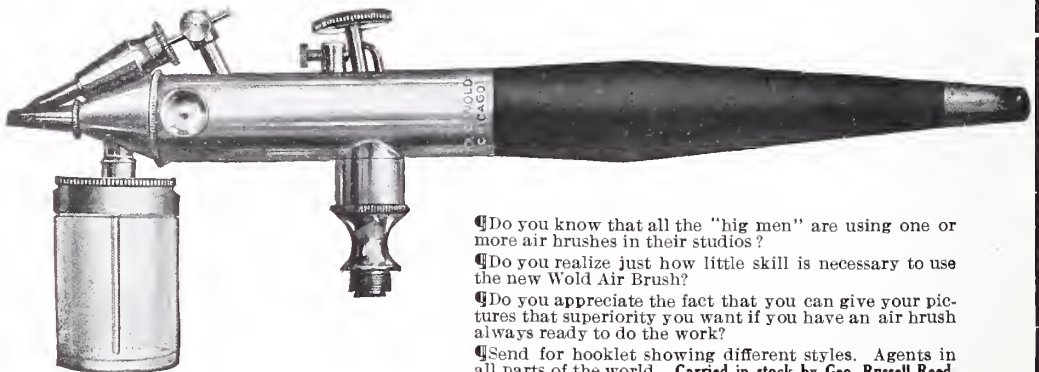
## Wanted

A number of experienced men to sell direct to the photographers, line of photo mounts and folders. Liberal commission basis. Must know the trade, territory to be divided between Salt Lake and Los Angeles. Answer with references.

**WALCUTT BROTHERS COMPANY**

Photo Mount Dept.

409 Pearl St., New York City, N. Y.



☞ Do you know that all the "big men" are using one or more air brushes in their studios?

☞ Do you realize just how little skill is necessary to use the new Wold Air Brush?

☞ Do you appreciate the fact that you can give your pictures that superiority you want if you have an air brush always ready to do the work?

☞ Send for booklet showing different styles. Agents in all parts of the world. Carried in stock by Geo. Russell Reed, 645 Battery St., San Francisco.

For Sale by  
Sanborn, Vail & Co., Portland  
Hirsch & Kaiser, San Francisco  
R. A. Leet & Co., Oakland  
Rabjohn & Morcom, Oakland

## O. C. WOLD

716-724 W. Madison Street  
Chicago Illinois, U.S.A.

Please Mention Camera Craft when Corresponding with Advertisers.

# THE "HALL" MIRROR CAMERAS

The only METAL REFLEX  
CAMERA in the world.



HALL MIRROR CAMERA

|   |              |         |
|---|--------------|---------|
| Size $2\frac{1}{2} \times 4\frac{1}{4}$ | Without Lens | \$25.00 |
| " $3\frac{1}{4} \times 4\frac{1}{4}$    | "            | 30.00   |
| " $3\frac{1}{4} \times 5\frac{1}{2}$    | "            | 35.00   |
| " $4 \times 5$                          | "            | 35.00   |
| " $5 \times 7$                          | "            | 50.00   |
| " $2\frac{1}{2} \times 4\frac{1}{4}$    | With Lens    | 30.00   |
| " $3\frac{1}{4} \times 4\frac{1}{4}$    | "            | 55.00   |

You see the picture right side up on the ground glass, as it will appear in the negative, up to the instant of exposure.

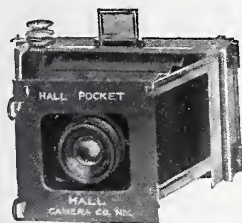
Fitted with the Hall Focal Plane Shutter Speeds from Time up to 1-1500 part of a second. The only reliable shutter. Any desired aperture you require.

Any standard size plate holder, also film pack, fits the Hall Mirror Reflex Camera.

*Ask your dealer to order one for you.*

## HALL POCKET CAMERA

A New Creation Constructed of Metal



HALL POCKET CAMERA

This small camera is fitted with the Hall Focal Plane Shutter and takes a picture size  $1\frac{3}{4} \times 2\frac{3}{8}$  Film Pack only.

You can stop the fastest moving objects. Fitted with a special lens of universal focus taking wonderful pictures that can be enlarged. A scientific instrument, not a toy.

Camera with Lens and Case, \$15.00

*Send for Catalogue*

## The Hall Camera Co.

Mfrs. Office and Factory

14-18 DUNHAM PLACE

BROOKLYN, N. Y.

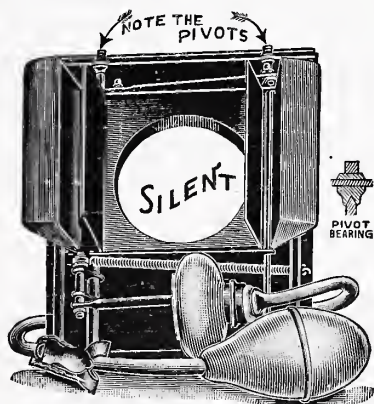
# COOKE LENSES

The use of a Cooke anastigmat lens brings permanent satisfaction both to amateur and professional. The lenses are made for all the purposes of the best photographers, and are known the world over for their wonderful brilliancy and defining-power combined with a rare beauty of workmanship.

Write today for a fine catalogue with "Helps to Photographers."

THE TAYLOR-HOBSON COMPANY

Eleven thirty five Broadway, N. Y. City



Notice how simple they are made.

## "Silence is Golden"

The professional photographer appreciates the advantage of a silent shutter. When that desirable feature is combined with a simple and scientific construction, one doing away with all cogs, ratchets, valves, scraping wings, and the like, one then has the ONLY SILENT STUDIO SHUTTER. It "opens without a sound."

They are patented and made only by us. Be sure your order reads S-I-L-E-N-T, and accept no other. For sale by all jobbers. Its best recommendation--thousands of satisfied users.

Manufactured only by

## Conley Camera Company

Rochester, Minnesota

Please Mention Camera Craft when Corresponding with Advertisers.



# DO YOU LIKE CURLY PRINTS? IF NOT, TRY

DEALERS:  
WE HAVE AN  
ATTRACTIVE  
PROPOSITION.



Write for  
"Doing It Right"  
and Price List  
FREE

NOTHING EQUAL FOR PORTRAITURE—IN ALL NECESSARY STUDIO GRADES  
All our products now rendered non-curling by a special coating on the back of the stock. You may be interested in  
**INSTANTO**, an inexpensive product of remarkably good quality for commercial, amateur  
or portrait work. Made in a variety of grades in papers and postals.



Free Samples to Professionals. Amateur Samples 25 Cents.  
**THE PHOTO PRODUCTS CO. (Dept. E)**  
6100 LA SALLE STREET, CHICAGO



## VICTOR INTENSIFIER

ONE SIMPLE SOLUTION



This half was intensified for one  
and one-half minutes in Victor  
Intensifier.

This half shows the condi-  
tion of the negative before in-  
tensifying.

### MAIL US

one of your under-exposed films, together with a print  
from same. We will intensify the film and make a print  
from it *free of charge*, enabling you to see contrast before  
and after intensification.

Your Dealer Carries and Recommends It

| Sizes                       | PRICES |        |           |          |
|-----------------------------|--------|--------|-----------|----------|
| No. 1 Powder, makes 4 ozs., | - 20   | cents. | By mail - | 25 cents |
| No. 2 " " " 8 " "           | - 35   | "      | " " "     | - 40 "   |
| No. 3 " " " 16 " "          | - 65   | "      | " " "     | - 72 "   |

**JAS. H. SMITH & SONS CO.** 3541 Cottage Gr. Av.  
CHICAGO

## You Can Make Six Dollars a Day

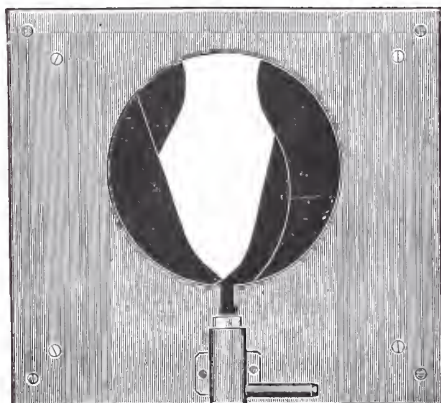
WITH ONLY A SMALL  
CAPITAL INVESTED

*Write for our descriptive circular of the  
free gift proposition for agents*

DON'T PASS THIS OPPORTUNITY  
YOU CAN NOT LOSE

**Multiscope & Film Co.**

Burlington, Wisconsin



## LOW STUDIO SHUTTER No. 5

The Low Studio Shutter No. 5 has four wings all operating from the bottom of the shutter, thus giving the correct introduction of light, and allows a large opening in a small shutter. It operates with ease and rapidity, is simple, accurate, reliable, durable, and noiseless in opening. For years it has been "Weighed in the Balances and not found Wanting." That is the test that convinces.

| Opening    | Outside | Dimensions | Price  | Opening | Outside        | Dimensions | Price  |
|------------|---------|------------|--------|---------|----------------|------------|--------|
| 1 1/2 inch | 3       | .....      | \$1 00 | 3 inch  | 5 1-16 x 5 5-8 | .....      | \$5.00 |
| 1 3/4 "    | 3 3/8   | .....      | 4.00   | 3 1/4 " | 5 1-2 x 6      | .....      | 5.00   |
| 2 "        | 3 7-8   | .....      | 4.00   | 3 1/2 " | 5 3-8 x 6 3-8  | .....      | 5.00   |
| 2 1/4 "    | 4 1/8   | .....      | 4.50   | 4 "     | 6 5-8 x 7 1-8  | .....      | 5.50   |
| 2 1/2 "    | 4 3/4   | .....      | 4.50   | 4 1/2 " | 7 3-8 x 8 1-16 | .....      | 6.00   |
| 2 3/4 "    | 5 1/4   | .....      | 4.50   | 5 "     | 7 7-8 x 9      | .....      | 6.50   |

**KALAMAZOO SHUTTER CO.**

KALAMAZOO :: MICHIGAN

Please Mention Camera Craft when Corresponding with Advertisers.

*More Popular Than Ever*

# PEERLESS

## Japanese Transparent WATER COLORS

The Famous "Self-Blending Colors"

Wonderful Effects With Little Labor  
A Child Can Use Them Successfully

The successful coloring of photographs, lantern slides, post cards, etc. by the amateur, dates from the introduction of these beautiful colors into this country, several years ago. Japanese Water Colors have made this work a fascinating pastime.

Ask your dealer for a set of these colors and see that you are not handed a *substitute*. A complete set of 15 colors with full printed instructions costs but 75 cents.

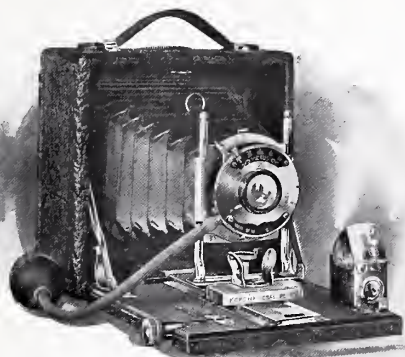
Mailed postpaid on receipt of price, if you cannot get them of your dealer.

ADDRESS

### Japanese Water Color Co.

56 E. 23rd St., New York City, or Rochester, N. Y.

We are the **SOLE IMPORTERS** of these colors.



## KORONAS, THE CAMERAS OF QUALITY

No matter what price you wish to pay there is a KORONA for the money to give you the best value and a perfect lens. Korona Hand Cameras and View Cameras typify the evolution in camera construction and by constant improvement combine all the good points and conveniences with fine workmanship. Our cameras actually cost less than others of inferior design and finish merely because we have reduced camera making to a scientific and economical basis by years of experience.

A Korona Catalogue will prove interesting and tell you all about our distinctive features of camera construction, all about our photographic lenses, including the wonderful Pancratic Telephoto.

**GUNDLACH-MANHATTAN OPTICAL CO.**  
766 Clinton Ave. So. Rochester, N. Y.



## PRINT YOUR NEXT PICTURES ON ARTATONE

THE NEW PAPER

Artatone is a sensitized, handmade Japanese tissue, requiring only development in a weak solution of hypo to produce rich and striking tone effects. Prints in daylight. Easily handled. Adds 100 per cent to the beauty of every negative.

Sent postpaid on receipt of price, if your dealer does not keep it.

| SIZES              | PRICES               |
|--------------------|----------------------|
| 3 1/4 x 4 1/4..... | 30c. per doz. sheets |
| 3 1/4 x 5 1/2..... | 35c. "               |
| 4 x 5.....         | 40c. "               |
| 5 x 7.....         | 70c. "               |
| 6 1/2 x 8 1/2..... | \$1.20 "             |
| 8 x 10.....        | \$1.60 "             |

OTHER SIZES ON REQUEST



Sole Trade Agents

**Herbert & Huesgen Co.**

Specialists in Things  
Photographic

311 Madison Ave. Room 10, New York

Please Mention Camera Craft when Corresponding with Advertisers.



## SPECIAL "GET ACQUAINTED" OFFER

**I**N order that you may become acquainted with the high quality of our bromide enlarging, we will, during the next few months, make you from any small negative sent, an 8x10 enlargement, either black-and-white or sepia, in neat oak frame, and send postpaid, for \$1.00.

This is an exceptional opportunity for you to make a number of acceptable gifts that will be more appreciated than the regular stock offerings of the stores. Order as many as you wish from one or a number of negatives.

**Arthur Spaulding Co.**

625-633 EDDY STREET SAN FRANCISCO, CAL.

## KROPP'S 1912 QUALITY LOCAL VIEW CARDS



Superior to others in workmanship.  
Have a distinctive art value in themselves.  
Prices surprisingly low, considering quality.  
Sure to please your trade.

### GLAZED LITHOCHROME

\$3.00 to \$4.50 per M, according to quantity.  
Top Notch Quality—The Kind that Sells.

Quick delivery assured on all orders.  
Send good Photos of any size.

**PREPARE NOW FOR SUMMER TRADE**  
Samples Upon Request

**E. C. KROPP CO.** 210 Buffalo St.  
MILWAUKEE, WIS.

*Voigtlander*



## An "All Round" Lens that Deserves the Name

Where a lens capable of the widest range of work is desired, the Collinear III is pre-eminent. It is a symmetrical anastigmat, equally available for landscapes, interiors, groups, copying, enlarging and instantaneous work.

With the smaller stops it is a highly satisfactory wide-angle lens. Its speed, F-6.8, is sufficiently great for all classes of work.

Try this lens and satisfy yourself as to its "All Round" superiority.

*Illustrated Catalogue on request.*

**A. G. Voigtlander & Sohn**

Works: Brunswick, Germany

240-246 E. Ontario Street, Chicago

225 Fifth Avenue, New York

Hupfeld, Ludecking & Co., Canadian Agents, Montreal, Canada

Please Mention Camera Craft when Corresponding with Advertisers.

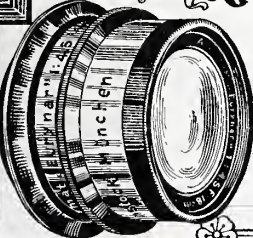


# CRAMER CROWN PLATES

Their great speed and latitude combined with exquisite chemical qualities, insures a high percentage of fine negatives.

G. CRAMER DRY PLATE CO.

ST. LOUIS  
MO.



F.4.5, F.5.4, F.6.8

**G. RODENSTOCK**  
DOUBLE ANASTIGMAT

**"EURYNAR"**

**NEW CATALOGUE OF RODENSTOCK LENSES**

Don't fail to send for our New Catalogue describing in detail the Celebrated Double-Anastigmat "EURYNAR", the Wide-Angle Anastigmat "PANTOGONAL" (130), and the new "MENTOR" German Reflex Camera.

Besides containing a wealth of information about Photographic Lenses, this Catalogue is a work of art, quite in keeping with the high quality of the goods it advertises. Send 1 cent postage with your name to

**KREPS & STELLING**

**Augusta, Ga.**

SOLE AMERICAN AGENTS.

## SOMETHING NEW

# ROTOGRAPH BROMIDE PAPER GRADE "T"

Semi Matt, medium Rough Surface. Heavy Buff Stock. No advance in price.

PACIFIC COAST TRADE SUPPLIED BY

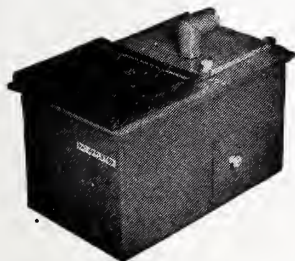
A. J. Park & Co., 111 Columbia St., Seattle, Wash.  
Woodard-Clarke & Co., Portland, Ore.

F. F. Munsey Co., Los Angeles, Cal.  
F. T. King, 450 Market St., San Francisco, Cal.

ROTOGRAPH PHOTO PAPER CO.

PHILADELPHIA

# THE OLSON MAGNESIUM PRINTER



Do you want your prints to be good every time? Your greatest trouble in making good prints has been to give them the correct exposure. Our printer is easily set to furnish correct amount of light for any negative. It does NOT require gas, oil, or electricity and can be operated anywhere at any time. It is the most practical printer on the market at a reasonable price. Guaranteed or money refunded.

AMATEUR SIZE, \$6.50

PROFESSIONAL SIZE, \$12.50

Write for descriptive circular

OLSON PHOTO MACHINE CO.

::

::

308 Main Street, Plattsmouth, Nebraska

Please Mention Camera Craft when Corresponding with Advertisers.

# PROBUS

## HAVE YOU TRIED IT YET?

PROBUS is not an ordinary paint; it is manufactured especially for photographic purposes. Repeated tests have demonstrated that PROBUS is impervious to the action of any of the chemicals used in photography. It will not affect the most sensitive solution and will keep your sinks, trays, etc., in a thoroughly acid, alkali and water-proof condition. PROBUS is invaluable, its uses innumerable. Photographers realize that it pays to use PROBUS. Darkroom walls, shelves, tables, etc., painted with PROBUS can be washed when soiled; and, when after long service renewal is desired, a fresh coating makes them new, fresh and bright. Trial tin 35 cents.

ALL DEALERS

## WOLFF & DOLAN

MANUFACTURERS

220 Post St.

San Francisco

## POST CARDS

ARTEX "Slow"

ARTEX "Imperial"

**Artex "Slow" Cards.** Manufactured only in double weight stock, smooth semi-matte surface.

**Artex "Imperial" Cards.** Manufactured only in double weight stock, smooth semi-matte surface.

*Coated on Pure Linen Stock  
Do not Confuse Them with  
Inferior Goods*

### PRICES

PREPAID TO ANY ADDRESS

|                |   |   |   |   |   |        |
|----------------|---|---|---|---|---|--------|
| One Dozen      | . | . | . | . | . | \$ .15 |
| One Half Gross | . | . | . | . | . | .85    |
| One Gross      | . | . | . | . | . | 1.50   |
| Box of 500     | . | . | . | . | . | 4.50   |
| Boxes of 1,000 | . | . | . | . | . | 8.00   |

MANUFACTURED BY

### The Artex Photo Paper Co.

COLUMBUS, OHIO



## Carry Your Light Where You Carry Your Lens

The light is as fully under control as a searchlight, yet as soft as that from a ground-glass skylight.

The machine consumes its own smoke, making no dust, smoke or stench. As cleanly as your camera.

It is automatic in firing, being loaded with twelve cartridges for that number of exposures in rapid succession.

The two small containing cases are as portable as two hand bags. It takes less time to set up than the camera.

The superiority of flashlight in the matter of texture and color values is acknowledged. Coupled with our diffusion it excels.

### The Towles-Schofield Co., Inc.

1530-1532 Pennsylvania Ave. S. E. Washington, D. C.

(Please mention Camera Craft when you write)

## VICTOR OPAKE

is unequalled for Spotting, Blocking Out or Writing on Negatives.

Put up in smooth paste form absolutely free from lumps or grit.

**Three-quarter Oz. Jar,** sent postpaid for **25c.**

JAS. H. SMITH & SONS CO. 3541 Cottage Grove Ave., Chicago

## LUXO The KING of Flash Powders

Better than ever. Ask your dealer for it. Valuable Flashlight information free for the asking.

C. L. BUCHANAN, Luxo Manufacturer

PHILADELPHIA

STATION R

Please Mention Camera Craft when Corresponding with Advertisers.



**FIRM**, quick-drying emulsion with the least possible tendency to frill is requisite for satisfactory negatives under the trying conditions of spring and summer. That's why Hammer's Special Extra Fast (red label) and Extra Fast (blue label) Plates are unsurpassed. They have stood the test of the tropics and will do it again every time. Hammer's Orthochromatic Plates have widest possible range of color values.



Hammer's Little Book, "A Short Talk on Negative Making," mailed free.

# Hammer Dry-Plate Company

Ohio Ave. & Miami St.

St. Louis, Missouri

## Local View Post Cards Made to Order

from your own photographs. We furnish half-tone cut and print them in beautiful art tone shades in lots of 250, 500 and 1000. 10c. brings 10 sample cards and particulars.



**PRINTED SPECIALTIES FOR AMATEURS**  
Exposure Record, 10c. Negative Envelopes, Stereo Mounts, Gummed Labels, Stationery for social correspondence. Visiting Cards: 50, 25c.; 100, 40c. Send for free samples.  
**THE IVY PRESS, Box 730, IVYLAND, PA.**

## NO PAPER

IN USE TO-DAY APPROACHES

## Japine Sepia Platinotype

in the vigor and beauty of its sepia tone. It is a "one-operation" paper: Print, develop and the print is made

Send for sample print and directions

**WILLIS & CLEMENTS**  
PHILADELPHIA

EIGHT OTHER BRANDS IN MATT SURFACE

## Mount Your Photos or Post Cards With Engel's Quick Way Patented



## "Art Corners"

Millions in Use

Made from strong stock—  
heavily gummed on back—  
especially adapted for Albums, Scrap Books, etc.

**100  
For 10c**

Quick, effective, artistic—  
no muss—no bother—  
so simple a child can use them. Just the thing for temporary or permanent mounting; superior to anything on the market for the purpose.

## SPECIAL OFFER

Send 50c for 5 packages (500 "Art Corners") and we will mail FREE a beautiful Art Study framed with Engel's Quick-Art Picture Framing. Write today.



**ENGEL MFG. CO.**

1450 Leland Avenue, Chicago, Ill.





FROM SERIES I VELOSTIGMAT NEGATIVE  
By W. b. Beasley, New York City.

## Velostigmats

are Anastigmats of the highest quality  
fully corrected, optically perfect  
beautifully finished absolutely  
guaranteed and moderate in price.



*Series I Velostigmat*  
*Speed F:6.3*  
*The "General Purpose" Anastigmat.*

*Series II Velostigmat*

*Speed F:4.5*  
*The "Ultra Speed" Anastigmat.*



*Series III Velostigmat*  
*Speed F:9.5*  
*The Perfect Wide Angle Anastigmat.*

"Ask Us Or Your  
Dealer About  
Them."



"Your Dealer Is  
A Wollensak  
Dealer."

HAVE YOU OBTAINED YOUR COPY  
OF OUR NEW CATALOGUE?

**Wollensak Optical Company**

ROCHESTER, NEW YORK.

## Ingento Developing Tablets



READILY SOLUBLE

**"Just Drop in a Graduate and  
Crush with a Stirring Rod."**

Could anything be simpler? And  
it is just as easy to practice as it  
looks in print.

With Ingento Tablets you can  
make up pure, active solutions in  
half the time required by the scale  
methods, and furthermore, your  
chance of error is practically elimi-  
nated.

The economy, accuracy and con-  
venience of these tablets find favor  
with earnest amateurs everywhere.  
If you are not yet a user, let's get  
acquainted. Fill out the coupon  
and mail it to-day.

## BURKE & JAMES

INCORPORATED  
CHICAGO, ILL.

BURKE & JAMES, Inc.  
240-246 E. Ontario St., Chicago

Date.....

GENTLEMEN: For the enclosed 10 cents (stamps or  
coin) send me a Test Package of Ingento M. Q. De-  
veloping Tablets containing sufficient tablets to  
make 18 ozs. of Normal Developer.



Name.....

Address .....

Send 25 cents for year's subscription to Ingento Photo  
News. A sample copy will be sent on request.

Please Mention Camera Craft when Corresponding with Advertisers.

# BEWARE OF MIXTURE PRODUCTS

(SAID TO CONTAIN "METOL")

For your protection always insist on  
"Agfa" METOL in Original Bottles

The "Agfa" Formulæ Book, mailed anywhere for 10 Cents, gives you Formula for *All Makes of Plates, Films and Papers*

SEND AT ONCE FOR A COPY

## BERLIN ANILINE WORKS

213-215 WATER STREET, NEW YORK

Canadian Agents: Hupfeld, Ludecking & Co., Montreal, Canada



**A Crown Anastigmat**  
on your camera would make possible pictures which could not be obtained with a less efficient instrument.

Crown Anastigmats are made in three series and are sold by your dealer. Try them.

**Crown Optical Company**  
Rochester :: New York

## PHOTOGRAPHIC ACCESSORIES

*Send your name for the largest illustrated catalogue of photographic studio skylight accessories ever published.*

**ROUGH & CALDWELL COMPANY**

DESIGNERS AND MANUFACTURERS

140th St. and Walton Ave. Bronx, New York City

**WANTED—STUDENTS** to enroll at Lively's Southern School of Photography, McMinnville, Tenn. Term begins April 1st and continues the entire year. Rapid methods of instruction in all branches. Write for catalogue.

## WE PRINT

For Amateurs or Professionals

Postals or up to 8 x 10, AZO,

ARTURA, VELOX :: ::

GET OUR PRICES

==

**MAPLE LEAF STUDIO**

C. H. Foster, Manager

KINGSVILLE

ONTARIO

CANADA

Please Mention Camera Craft when Corresponding with Advertisers.

# Our Clubbing Offers

Canadian and Foreign Postage rates vary with the different Magazines.



| Our Price.   |        | Our Price.   |         |
|--|--------|--|---------|
| CAMERA CRAFT . . .   | \$1 00 | CAMERA CRAFT . . .   | \$1 00  |
| Sunset Magazine . . .  | 1 50   | Delineator . . .   | 1 50    |
| Three Sunset Indian Posters,<br>22x28 printed in 2 colors<br>or any other one of the following | \$1.50 | Everybody's . . .  | 1 50    |
| Designer . . .   | 75     |  | \$4 00  |
| Photographic News . . .  | 1 00   | CAMERA CRAFT . . .   | \$1 00  |
|  |        | The American Magazine . . .  | 1 50    |
|  |        | Woman's Home Companion . . .   | 1 50    |
|  |        |  | \$3.00  |
|  |        |  | \$4 00  |
| CAMERA CRAFT . . .   | \$1 00 | CAMERA CRAFT . . .   | \$1 00  |
| Esperanto and . . .  | 1 00   | Review of Reviews . . .  | 3 00    |
| Full Text Book of Esperanto . . .  | 1 00   | or any other one of the following  |         |
| or any other one of the following  | \$1.70 | Current Literature . . .   | 3 00    |
| American Boy . . .   | 1 00   | Outing . . .   | 3 00    |
| Delineator . . .   | 1 50   | Photo-Miniature . . .  | 3 00    |
| Metropolitan . . .   | 1 50   | Travel . . .   | 3 00    |
| Pacific Monthly . . .  | 1 50   | Wilson's Photographic Magazine . . .   | 3 00    |
| Pictorial Review . . .   | 1 00   | World Today . . .  | 3 00    |
| Success . . .  | 1 00   | World's Work . . .   | 3 00    |
|  |        | CAMERA CRAFT . . .   | \$1 00  |
| CAMERA CRAFT . . .   | \$1 00 | House and Garden . . .   | 3 00    |
| Good Housekeeping . . .  | 1 50   |  | \$3.25  |
| or any other one of the following  | \$1.95 |  | \$4 00  |
| Ainslee's Magazine . . .   | 1 50   | CAMERA CRAFT . . .   | \$1 00  |
| American Magazine . . .  | 1 50   | Delineator . . .   | 1 50    |
| American Photographer . . .  | 1 50   | World's Work . . .   | 3 00    |
| The Camera . . .   | 1 50   |  | \$3.50  |
| Cosmopolitan . . .   | 1 50   |  | \$5 50  |
| Etude . . .  | 1 50   | CAMERA CRAFT . . .   | \$1 00  |
| Everybody's . . .  | 1 50   | Cosmopolitan . . .   | 1 50    |
| Hampton's . . .  | 1 50   | Good Housekeeping . . .  | 1 50    |
| Housekeeper . . .  | 1 50   | World To-day . . .   | 3 00    |
| McClure's . . .  | 1 50   |  | \$3.50  |
| Photo Era . . .  | 1 50   |  | \$7 00  |
| Photographic Times . . .   | 1 50   | CAMERA CRAFT may be added to any<br>combination you want. Get our<br>price. We will also duplicate any<br>combination offered by others and<br>include CAMERA CRAFT for fifty<br>cents additional. | 50 cts. |
| Popular Electricity . . .  | 1 50   |  |         |
| Technical World . . .  | 1 50   |  |         |
| Woman's Home Companion . . .   | 1 50   |  |         |
| CAMERA CRAFT . . .   | \$1 00 |  |         |
| Bulletin of Photography . . .  | 1 75   |  |         |
| or   |        |  |         |
| Physical Culture . . .   | 1 50   |  |         |

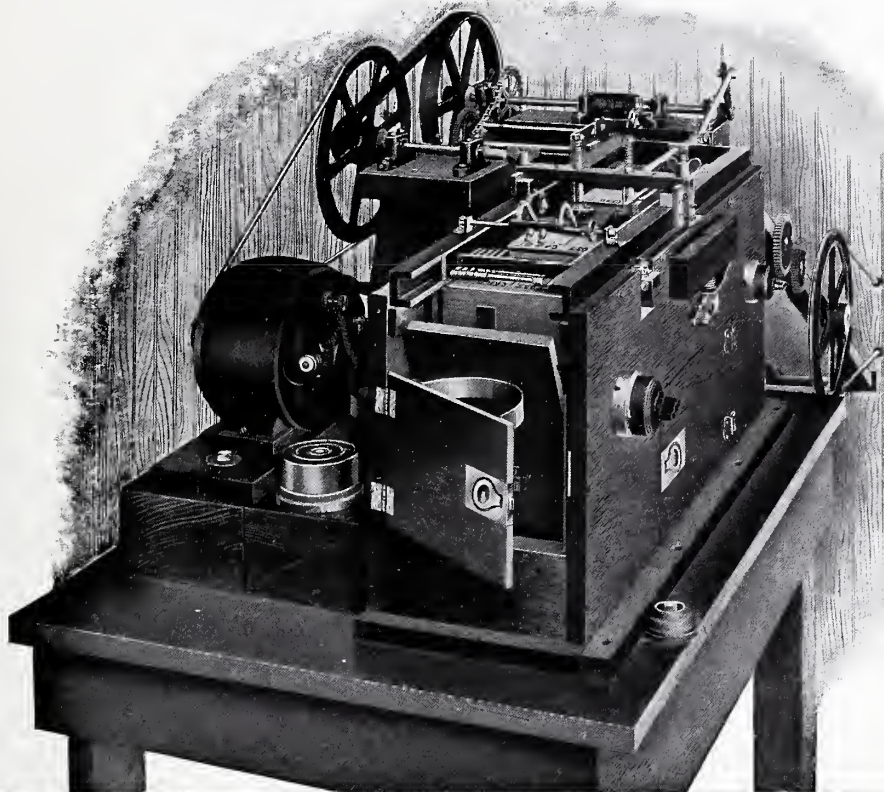


## CAMERA CRAFT

413-415 Call Building

San Francisco, California





**THIRTY THOUSAND**  
**PHOTOGRAPHIC POSTCARDS**  
**PRINTED FROM ONE NEGATIVE**  
**AT 1 ½ CENTS PER THOUSAND**  
**IN NINE HOURS' TIME**

Impossible you say. Nothing is impossible in this day of automatic machinery. The above figures represent the actual running cost of THE SPAULDING AUTOMATIC POSTCARD PRINTER on a recent run of 30,000 photographic postcards. The cards were all perfectly and uniformly printed, better in every way than the best hand work. Quite a saving of labor too when one person can print postcards at the rate of 3,000 to 36,000 per hour. We have issued a little booklet, "FACTS," about this printing machine, and would like to send one to you if you are printing postcards in quantities.

**ARTHUR SPAULDING COMPANY, LTD.**  
631-633 EDDY STREET                      SAN FRANCISCO, CAL.

Please Mention Camera Craft when Corresponding with Advertisers.

# SUNSET, The Pacific Monthly for July

**POTLATCH TOWN**, an intimate study of Seattle, between the mountains and the deep sea, below the straits of Haro, by Walter V. Woehlke. Seattle, the city that leveled its hills to get ready to do business on the level ground floor in anticipation of the Panama Canal activities, as everybody knows, is also situated nearer than any other of equal size to the Great Outdoors, as almost nobody knows. Mr. Woehlke found that Seattle had never tried to tell people of the scenic wonderland about her. Therefore he writes in the July number regarding the possibilities of the Puget Sound region. One of the color illustrations of this article is as beautiful as a Japanese print.

**ALASKA, A CONDITION AND A PROGRAM.** Governor Walter E. Clark talks "right out in meeting" about the territory he governs and the things that some people are doing to it. A particularly timely article, full of practical suggestions.

**MOTOR - BOATING ON PUGET SOUND**, by A. V. Comings, editor of the "Pacific Motor Boat" and therefore is an enthusiast. The illustrations of this article justify all the author's enthusiasm.



## FICTION

**THE GREAT MONO MIRACLE** is called by its chronicler, Peter B. Kyne, an "echo of Mark Twain". The quick ear of this versatile yarn-spinner caught this echo among the eastern Sierras not long ago and he lost no time in reducing it to permanent form. How it escaped immortality so long is a mystery, unless perhaps Peter has begun where Mark left off. Illustrated by Maynard Dixon.

**WHEN THE DEVIL DRIVES**, by a new writer and a good one, W. Townend, who will be heard of again. Three excellent drawings by J. A. Cahill.

**EZQUIO**, by Grace Hodgson. A cameo sketch of Mexican peon life with humor in it like peppers in a tamale.

**ON A LEVEL**, by Neil Gillespie. A powerful little study of soldier life.



*People North and South; Stage Beauties East and West;  
Exposition Interest in the Four Corners of the Earth.*

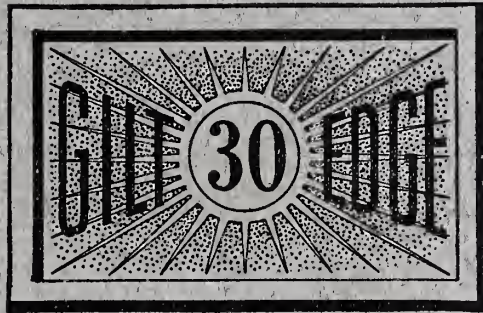
**SANE READING for the FOURTH**



**CAPTAIN OF HIS SOUL** comes to an end in July. A host of people will be glad of the ending and sorry to have it. That's the usual inconsistency of readers when a novelist has won them. But cheer up! There's a delightful surprise coming when the Captain's successor is announced. Tighten up your heart strings. Somebody who knows how is going to play upon them pretty soon.



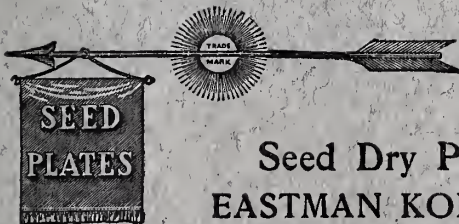
# Seed



# Plates

May be depended upon for any emergency.

The one plate that combines extreme speed with that beautiful gradation and fineness of grain so characteristic of all Seed Plates is the Gilt Edge 30.

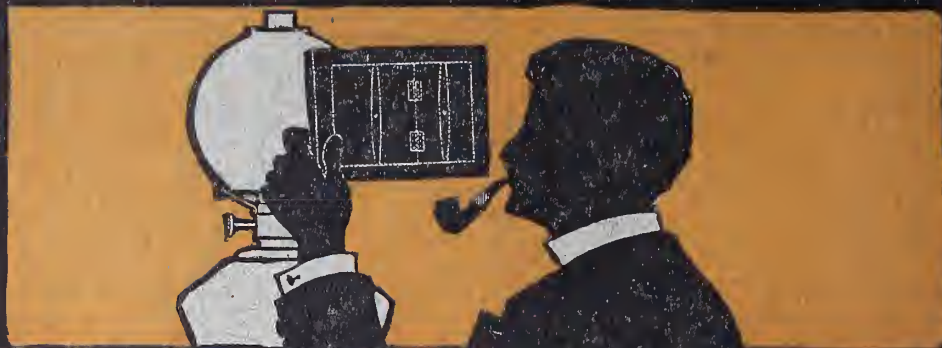


*All Dealers.*

Seed Dry Plate Division,  
EASTMAN KODAK COMPANY,  
ROCHESTER, N. Y.

Please Mention Camera Craft when Corresponding with Advertisers.





## Prints by Gaslight

For clean cut, snappy, vigorous prints from your Kodak negatives, use

# VELOX

It's the way it's made—to fit the average amateur negative.

*The Velox Book tells you how.  
Free at your dealers or by mail.*

**THE EASTMAN KODAC COMPANY,**  
ROCHESTER, N. Y.

*All Dealers.*

Please Mention Camera Craft when Corresponding with Advertisers.